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# ***JPRS Report***

## **Soviet Union**

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***Military Affairs***

# Soviet Union

## Military Affairs

JPRS-UMA-89-026

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9 November 1989

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### **Reservists Patrol Streets To Protect Kharkov Plant Area**

18010895c Moscow KRASNAYA ZVEZDA in Russian  
3 Sep 89 First Edition p 3

[Article by V. Fomenko: "Worker Patrol Goes Out"]

[Text] Worker patrols have assumed the responsibility for ensuring order in the residential micro-region of the Kharkov Electronics Plant Production Association. Reservists who were seasoned in combat in Afghanistan are assigned to them. Husky lads in uniform, monitoring the streets where 11,000 plant workers live, vigilantly stand night watches and decisively repulse hooligans who get out of hand.

"The decision to institute order in the micro-region with its own forces was made jointly by the party committee of the production association and the reservist council," says A. Gribkov, chairman of this council. "This was brought about by the tense situation: There were frequent drunken fights, and the precinct policeman was not able to put a stop to them."

The lads go out on patrol after completing their workshifts in the shops; after the second shift they are on duty from midnight until dawn, and in the evening their comrades ensure order after the first shift.

### **Military Readers Comment on Nationalities Issues**

18010890a Moscow KRASNAYA ZVEZDA in Russian  
13 Sep 89 First Edition p 1

[Letters to the editors on nationalities issues]

[Text]

#### **Readers on Interethnic Relations**

The restructuring of interethnic relations has occurred in an extremely complex manner. The responses received by the editors to the draft CPSU Platform "On Party Nationality Policy Under Present-Day Conditions" have indicated that the Soviet people support radical changes in this area.

The realities of life have repudiated the former dogmas and notions concerning the "stability of the nationality question." What is waiting for us? How can we halt the development of negative trends? The draft platform outlines the foundation and main areas of party activities. The local bodies, the readers feel, should create a mechanism capable of productively resolving the questions of interethnic relations.

We are continuing to publish letters received by the editors.

#### **On a State Basis, by Capt 3d Rank Yu. Grigoryev from Vladivostok**

I was born in Yakutia and I am a Yakut by nationality, but I went to Russian school and have served many years now

in the Pacific Fleet. The draft CPSU Platform is particularly memorable in those lines where they speak of the importance of strengthening concern for maintaining and developing the languages of the minority peoples.

In actuality, concern for this must be shown on the state level. The indigenous population in Yakutia numbers around 700,000 persons. And is each Yakut capable of reading and writing in his mother tongue? The picture is rather lamentable. The younger generation in the towns prefers communicating predominantly in Russian and does not know the mother tongue fluently. Is this not an indication of the start of the degeneration of a people which has its own vivid culture and way of life and possesses everything necessary to feel themselves full partners in the fraternal peoples?

In all questionnaires opposite the line "mother tongue" I personally fill in Russian. There is not much I can do as I was not taught my mother tongue in school. But the time has now come when I feel in my heart that I do have something to say to my compatriots about military service, about patriotism, friendship and so forth. But I can only do this in Russian.

Last year, the Yakut Book Publishing House published my first small book on the service of fellow Yakuts. Recently I also prepared for publishing a tale entitled "Maritime People." But I deeply regret that it will not be read by all my fellow Yakuts, many of whom have a poor knowledge of Russian (particularly in the interior). But how can the situation be rectified? I see one way out and that is we must have a new nationality policy which would help to maintain the language and culture of each people of our country.

#### **A Proposal...**

Sr Lt Yu. Moroz (Northern Group of Forces):

In a number of Union republics there are special boarding schools for preparing local young persons for admission to military schools. But the results of the activities of these schools are rather meager. For precisely this reason, in my view, there are so few officers in the Armed Forces who are natives from the Baltic, Central Asia, Transcaucasus and elsewhere.

In this context, I propose adding the following provision to the draft CPSU Platform: In each Union republic, it is essential to strengthen the military patriotic education and propagandize the glorious combat traditions of the Army and Navy.

Another Proposal...Maj V. Barannik from the Central Group of Forces:

The draft CPSU Platform points out that any attempts to defame persons due to nationality should be viewed as inadmissible for the Soviet state. In line with this, I consider it necessary in the near future to adopt a USSR law which would set responsibility for any discrimination due to nationality. Mere appeals alone, as life shows, are of no benefit.

**Hazing and Ethnic Groups**

Sr Lt A. Yaichenko, Black Sea Fleet:

Recently there has been sharp talk about "hazing" ["dedovshchina"]. But for some reason we are still very condescending for a different stagnating and very harmful phenomenon of the forming of groups of regular servicemen along nationality lines.

The explosive development of interethnic relations in certain areas has had a negative impact on the moral atmosphere in the Army and Navy collectives. Even a recent inductee with the support of other personnel of the same nationality with strong fists may indulge in bullying against a fellow serviceman who does not have a "nationality" back-up. In a word, serious thought must be given to these questions. We for some reason simply overlook such things. I proposed my comments on the harmful consequences of "nationality groups" to the editors of the fleet newspaper, but they refused to publish them.

**How Did Things Get So Far?**

Capt 1st Rank (Ret) M. Vaysak:

I am extremely concerned by the situation in the Baltic. Here there have been ever-growing attempts of individual forces to separate these republics from the Soviet Union. And a component part of this unseemly campaign has been the desecrating of the monuments of our military past and even—just think of it—the graves of those who have fallen in the battles of the Civil and Great Patriotic Wars.

Two of my brothers did not return from the war. The younger, the 18-year-old Ivan perished in liberating Latvia of the Nazi invaders. His name has been inscribed on the slab of one of the graves in the cemetery in Sigulda. The Latvian land has become for our family just as sacred and our own as the Ukrainian. And the Baltic soldiers with whom I happened to serve were always close and kindred persons for me.

And then these blasphemous actions by modern vandals. How could things reach this point? And what will become of us if we are unable to protect the sacred memory of those who gave up their lives for the sake of the life of present generations?

**Half Measures Will Not Do**

S. Zimanov, academician of the Kazakh Academy of Sciences:

In reacting sharply to the negative trends which are presently occurring in the interethnic relations, we should still assess them soberly and study their prime cause.

For this reason, I feel it desirable to make the following proposal for the draft CPSU Platform.

I feel that it is not sufficient to merely voice the notion which is correct in and of itself that under present-day conditions the solution to the nationality question can and should be found solely in the channel of the revolutionary renovation of our society. This reflects the general, so to

speak, situational aspect. In my view, we should supplement the draft with an indicating of the need to carry out fundamental transformations and reforms in the very sphere of nationality policy.

The draft says nothing about cadre work by the party in the Union republics and national autonomous areas. In the lifetime of V.I. Lenin, great attention was paid to the questions of training nationality cadres in the republics and autonomous regions. This can be seen, in particular, in the materials and decisions of the 12th Party Congress. The latter dealing with appointments remains pertinent today. During the period of the cult of personality a lax, mass approach was established to the practice of sending to the republics responsible party, state and economic workers regardless of their knowledge of the history, culture, traditions and language of the indigenous peoples and, consequently, their ability to work in the masses and with the masses.

**Ministry Instructions on Officer Assemblies  
Receives Mixed Response**

18010890b Moscow KRASNAYA ZVEZDA in Russian  
13 Sep 89 First Edition p 2

[Article by Maj Aleksandr Sergeyevich Bugay: "The Officer Assembly: First Steps"]

[Text] As has already been announced in KRASNAYA ZVEZDA, from 1 August, by orders of the USSR minister of defense, a temporary provision on the officer assembly has been put in effect. Maj Aleksandr Sergeyevich Bugay, appointed our permanent correspondent to the Northern Group of Forces, reports on how work is being carried out to set up the new social organization in certain units.

The start of the general assembly of the officer personnel was delayed. The unit commander was "held up" for 10 minutes. Then they waited for the division commander who had promised to be there.... When they decided to start without him, it was discovered that 6 men were lacking for a quorum. It took some more time for the subunit commanders to assemble the men.

Upon a recommendation "from above," those assembled were to hear a report on the honor and dignity of the Soviet officer. The sound accompaniment for it—no other phrase can be employed in the given instance—was provided by the deputy regimental commander for political affairs, Lt Col A. Yekamasov. The report was theoretically sound and backed up by examples from history. But it did not touch the officers because it did not involve their current concerns. In the regiment there are numerous outstanding officers, the speaker affirmed, but he read from his script and these deeds died in the air. Nor did things pick up with the listing of the "bouquet" of extraordinary events and which many of those present in the room had been involved in.

Then a pause arose in the work of the assembly.

"Who wants to speak?"

There was no one who wanted to. The silence in the room became heavy. I felt that the regimental commander Lt Col Yu. Kondratyev who was chairing the meeting wanted to bring the session to an end due to the taciturn stubbornness of his subordinates. Had he proposed this, the officers would certainly have agreed.

Then the commander did what he should have done at the very outset.

"Then I will take the floor," he said and began speaking about how we must not live as we did before with each closed up in his own little world. That the regiment still did not have a real competition and this could have helped increase combat readiness and strengthen discipline. That the soldiers and NCO's do not salute the officers and many of the officers tolerate this. The women's council works poorly....

And with this the assembly came to life....

Yes, it was not an easy matter to put into effect the temporary provision on the officer assembly. Although, as was provided by the order of the minister of defense, the appropriate instructional exercises and seminars were held with the officer personnel. Here it was emphasized that the assemblies in cooperation with the command, the political bodies, the party, Komsomol and trade union organizations, should increase the activeness and responsibility of the officer personnel for carrying out their military duty. That they should give particular attention to strengthening military discipline, prevent abuses of one's official position and manifestations of disdain, conceit, impoliteness, bureaucracy and other negative phenomena in the army milieu.

One of the difficulties was to surmount the stereotype attitude toward the meeting as a measure where the participants considered themselves to be mere extras. Certainly previously the assembly of the officers conducted often solely by the commander and exclusively for resolving service questions did not very much incline the men to open conversation or debate. Now the situation has changed. According to the temporary regulation, the office assembly operates on a democratic basis and in a situation of extensive glasnost and sincerity which contribute to an open exchange of opinions and free comradely contact. Naturally, the questions, and often very difficult ones, are asked of the command. Are those who at present are directly involved in organizing the work of the officer assemblies prepared for this?

Of course, the processes of democratization have also touched the headquarters element. But clearly not everyone is as yet convinced of their irreversibility. There are many reasons for this.

For example, take the relations between different-rank officers. Certainly it is no secret that at present the junior officers are more sensitive, for instance, to impoliteness and arrogance shown by the senior ones than before when this was almost considered standard. And it is completely natural that the point in the temporary provision where the issue is raised of measures of social action against officers

who have committed misdeeds of a moral and ethical sort has become a subject of acute debate among the officers.

According to the document, theoretically, so to speak, the work of the officer assembly is organized on a democratic base, that is, everyone is equal in it, regardless of military rank and service position. At the same time, the assembly has the right, for example, to initiate a petition to the command to remand only the junior officers to a comrade court of honor. But it is true that among the majors and higher ranks one does not encounter individuals who are not concerned with moral and ethical standards of conduct?

Or take the following question. The process of democratization in a unit is largely determined by the position of the commander. This determines whether he will contribute to the work of the officer assembly.

Let me refer for an example to the experience of organizing the officer assembly in the regiment under the command of Col N. Titarenko. Here they have not only taken an informal approach to studying the temporary provision (and this, unfortunately, cannot be said about certain other officer collectives where we were able to attend their assembly), but also try it out in practice. First of all, in the collective, in resolving organizational questions, they worked out an unanimous view on what the council of the officer assembly should be. With the approval of the commander, the council was made responsible for questions related to providing for the work of the social organizations, allocating housing and organizing the leisure of the serviceman families. That is, what is not directly related to organizing combat training and service. As a result, both the collective and the commander gained as he, as they say, now had freer hands.

But there are also other commanders who are also prepared to employ the officer assembly for establishing a command-pressure style of management. Who then can defend democratic ideas? Moreover, the temporary provision warns that a discussion and criticism of orders from commanders and superiors are not permitted. At the same time, all army life, as is known, is regulated by orders and all the officers in relation to one another stand either as a superior or as a subordinate. Consequently, the chairman of the officer assembly in the person of such an undemocratic commander can arbitrarily halt virtually any decision by an officer collective.

Of course, the officer assembly could also set out on a similar path. But for this it would be required to broaden its rights vis-a-vis the commanders and superiors. At first glance, these rights are rather broad. But often they have merely a recommendational nature since the decisions of the assembly are not binding for the superior commanders and chiefs. As was pointed out by Col Titarenko, the very chairman of the officer assembly does not have so much power as to be confident of the successful settling of problems which the officers raise for it.

"I am not responsible for the service promotion of even the platoon commanders," said the regimental commander,

"since this is the prerogative of the superior staff. And there, unfortunately, they do not always heed our opinion. So would they heed the opinion of the officer assembly?"

Thus, the first experience indicates that the successful activities of an officer assembly depend largely upon realizing the rights which it has been given. In my view, an interesting proposal has been made in this context by Maj N. Pavlukhin:

"The chief right of an officer assembly should be the right to remove an officer from the officer assembly for a month, 3 months, or half a year.... In order for this measure to be effective, it is essential to include in the assembly's competence the settling of questions concerning promotion and the transfer of officers in service and the allocating of social benefits. In this instance an officer removed from membership in the assembly would certainly give some thought to his conduct and his attitude toward service."

Generally speaking, in the units the temporary provision has been encountered in different manners. There are skeptics inclined not to believe in the possibility of fruitful activities by the officer assemblies and feel that this is merely another campaign. But a majority see in the fruitful activities of the assembly a way for surmounting many negative phenomena which are occurring in the army.

Whatever the case, the temporary provision provides an opportunity for the officers to test their strength in resolving accumulating problems. As was aptly pointed out, for example, by platoon commander Lt A. Gryaznov, the work of the officer assembly will depend on us ourselves. We should be able to channel its activities in the required direction.

One other issue. According to the temporary provision, the study, generalization and dissemination of the experience of the officer assemblies has been entrusted to the superior commanders and chiefs, to the political and personnel bodies. Possibly I am wrong, but there were no superior staff officers at those assemblies where I was present and at those which their participants describe. The political directorate of the group of forces has issued instructions for the political bodies to keep an eye out on the processes related to implementing the temporary provision. But regardless of this, as yet proper attention has not been paid at the initial stage to studying the experience of the activities of the officer assemblies. The study is being made basically by the report method.

I have read these reports. They are objective documents where there is an attempt made to penetrate the essence of the phenomenon. But they, due to their very brevity are unable to reflect the spirit of collective discussion. In order to get into them and understand what is bothering the men, it is essential to be a participant of these discussions.

Let us return to the work of the assembly which was mentioned at the outset. In listening to the ardent speeches of the officers, I was sorry that the division commander was not there. Certainly a solution to many of the problems raised by the speakers would require his personal involvement. For example, the officers said that a 15-hour

workday had become the standard in the regiment. And this was without days off and holidays. In improving combat readiness under the conditions of the cutback in the Armed Forces, one cannot infinitely employ the method of "tightening the screws." Nor have the problems of everyday life and protecting the health of the officers remained on the sidelines.

But still, regardless of the difficult path to an open discussion, they elected to the council of the officer assembly the worthiest, those whose work can contribute to increasing the authority of the authors and their social well-being and who can make the life of the men more meaningful and interesting. The officers left the assembly with a feeling of hope for the possibility of a change for the better.

Will the hopes be realized? Time will tell.

### **Baltic Military District Concern to Minimize Environmental Damage**

*18010890c Moscow KRASNAYA ZVEZDA in Russian  
13 Sep 89 First Edition p 4*

[Article by V. Biryukov and V. Zenkovich, TASS correspondents and written specially for KRASNAYA ZVEZDA: "The District Is Not On the Sidelines"]

[Text] **Recently the Presidium of the Latvian Supreme Soviet adopted a decree to set up in the republic a work group to investigate the consequences caused to the environment by the actions of army subunits.**

Has there been such great damage to the Latvian economy from the activities of the military that a special review is required?

Of course, the army is far from the "civilian" industrial magnates, however its negative impact on the environment has been noticed, commented the deputy chairman of the Latvian State Committee for the Conservation of Nature [Goskompriroda], G. Liyepa.

But the problems related to protecting the environment in the process of the daily life and activities of the troops are also of concern to the command of the Baltic Military District. One must also be concerned with this in the process of the cutback in troops. Take, for instance, the putting back in order of the places of the former unit positions. In Liyepaya, for example, a deconstituted unit left behind piles of rubbish and barbed wire....

"We are trying to work in close contact with the environmental bodies," said the chief of the Inspectorate for the Protection of the Environment in the Baltic Military District, Maj V. Romanenko. "Together with the leaders of the Latvian Goskompriroda, we have held a conference at which complaints were voiced about us. In particular, in the village of Rumbula, where previously there were both military and civilian airfields, their collective gardens have now been distributed. Their owners have discovered aviation kerosene in the ground water. At present it is impossible to establish to whom this belongs—the army or Aeroflot, but we are ready to assume responsibility for

improving the area. And a second question is being settled: a tank firing range located in the dune zone of the coast is to be moved to a different site. Generally, according to the data of the republic Goskompriroda, the 'contribution' of the district to polluting the environment is around 1 percent of the total for Latvia. Our inspectorate has also discovered violations. The guilty parties are being held materially liable for emergency discharges, for the leaking of oil products and illegal felling of timber and compensation is being paid to the injured party. Although these indicators may seem meager, I am far from merely trying to defend the 'departmental uniform'."

At present, the district is implementing a comprehensive plan of measures designed up to the year 1995. In particular, on Latvian territory they have already put into operation five large treatment facilities. Their total cost exceeds 2.5 million rubles. Construction is continuing. According to a schedule, the boiler facilities will be converted to ecologically cleaner types of fuel and they will be equipped with scrubbers. A great deal is also being done to prevent the leaking of oil products. Each year around 5 million rubles are spent for these purposes. In truth, the district does not have a special conservation item of expenditures in the district budget, and much will have to be done by drawing on allocations for social needs.

There are also difficulties with the situation of the inspectorate itself. Its aim is to organize nature conservation in the district. But how can this be done if the service has just two men? And the proper equipment does not exist. We have been waiting a year now for the promised laboratory.

The first steps have been hard to take by the recently organized ecological service of the Armed Forces. Many tasks confront it. But since we have assumed our share of responsibility for the purity of the nature surrounding us, we must set to work effectively.

#### **Military Components of Draft Party Platform Addressed**

*18010895a Moscow KRASNAYA ZVEZDA in Russian  
15 Sep 89 First Edition p 1*

[Article by Col O. Belkov, professor and doctor of philosophical sciences: "Not All Questions Are Clear"]

[Text] The strategic policy of military organizational development laid out in the draft CPSU platform is clear. It is written here that one of the chief goals of uniting the republics in to a union is to safeguard national security and peaceful labor of the Soviet people. The draft also discloses the basic ideas making it possible to implement out program goals.

But there are still some unclear issues.

In this regard, I would like to state a number of critical views. Of course, this involves not so much the final recipes as it does drawing attention to the positions which, in my view, should be studied at the upcoming CPSU Central Committee Plenum.

Of course, the actions of extremist forces trying to set the army off against the people and portray it as an anti-national force are absolutely intolerable. "The unbridled psychological and moral pressure on all the military that is taking place today deserves to be condemned," said A. Brazauskas, first secretary of the Lithuanian Communist Party Central Committee, addressing the population. All this is correct, but it is still only moral assessments. Service members, honestly and conscientiously carrying out their military duty in various regions of the country, need legal protection of their rights and personal dignity.

As regards the feelings of national alienation with respect to the army and hostility toward it, being thrust on the masses in some places, a clearly and firmly stated CPSU position should serve to prevent and overcome such feelings. The Party platform should emphasize that the USSR Armed Forces are a nationwide value of the Soviet society.

He who calls our army an army of occupation is committing blasphemy. Where have you seen it where the "occupier" is in worse social and economic conditions than the local populace? You see, that is often how it is.

The draft platform has one provision that requires elaboration. It states that the USSR Armed Forces are formed on a multi-nationality basis and that all citizens, regardless of nationality, must serve in accordance with the all-union laws. There is something left unsaid in this thesis. An army can be structured in different ways on the same multi-nationality basis. Thus, on the nationalities question, the draft platform of the Estonian Communist Party Central Committee raises the question about the "feasibility of creating regional military units, which would contribute to a positive attitude toward service in the Soviet Army and representatives of the many nationalities of the USSR." In the Supreme Soviet of the Georgian SSR, a group has been established under the constitutional commission to elaborate questions of restoring national military units and draftees performing military service on the territory of Georgia. The leadership of Latvia is striving for the republic's young people to serve in the Baltic region.

Where here are the separatist tendencies, where is the pride of inflamed ethnic feelings, and where is the understandable demonstration of a healthy increase in ethnic self-consciousness? Each specific instance should be carefully examined. It is clear that the nationality factor cannot be either the sole or the chief factor in resolving the issues of military organizational development. At the same time, a radical reorganization of the Soviet Federation should entail specific intentions in this area.

I believe that the portion of the draft provision where it states that all citizens, regardless of nationality, must serve in the military is also unrealistic. As we know, women are not obligated to serve in the military. Many young men are also exempt from doing so for a number of reasons. In Kirghizia, for example, 10 percent of the contingent of draftees last year turned out to be fit only for non-combatant duty and received a deferment or were considered altogether unfit for health reasons.

I believe it must be noted: Citizens of all nationalities must serve in the military in accordance with all-union laws. And this is not simply an editorial correction. The provision according to which the republics make their contribution to the accomplishment of defense tasks by the union bodies becomes clearer and more substantive in this context.

### **Kokoshin on Congressional Testimony, Relations with General Staff**

18010895b Moscow KRASNAYA ZVEZDA in Russian  
15 Sep 89 First Edition p 2

[Interview with Andrey Afanasyevich Kokoshin, corresponding member of the USSR Academy of Sciences and deputy director of the USA and Canada Institute, by Yelena Agapova, KRASNAYA ZVEZDA correspondent, under the heading "Invited Guest": "Our Man in Congress"]

[Text] Today, our invited guest is Andrey Kokoshin, corresponding member of the USSR Academy of Sciences and deputy director of the USA and Canada Institute. His field of scientific studies is international relations and problems of disarmament, defense, and security. His views on these issues are arousing heightened interest and are being discussed among experts, politologists, and the military, both in our country and in the West. Andrey Afanasyevich Kokoshin is the deputy chairman of the Committee of Scientists for Protection of Peace and Against the Nuclear Threat. He heads the Group of Public Observation of the Reduction of Armed Forces and Arms that was created in April.

*On that day, I was not the first journalist who had decided to interview Kokoshin. I replaced WASHINGTON POST correspondent Jeffrey Smith, a well-known columnist on national security issues. Our conversation also began with the "American" topic.*

[Agapova] Andrey Afanasyevich, as far as we know, you were the first Soviet to address the Armed Forces Committee of the U.S. House of Representatives. Marshal of the Soviet Union Sergey Fedorovich Akhromeyev was invited there not too long ago. The invitations, you would agree, are unprecedented...

[Kokoshin] I think that they are the result of the fact that the discussion of the central problems of national security has been clearly intensifying lately in the United States. I received an invitation from Chairman of the Armed Forces Committee Les Aspin to report in March on the "Unilateral Armed Forces Reductions and the New Political Doctrine of the USSR." The hearing was public and was televised. Americans, I would note, have an inherent special meticulousness and thirst for details and firsthand information. This is especially so for military-political issues. The Congressmen asked many difficult and often insidious questions. They have developed such hearing procedures over decades. I experienced this for myself, when I answered questions for more than 3 hours. In May I received another invitation to address them.

[Agapova] After this, I heard, the Americans started a joke going around: Only Oliver North has addressed the committee more than Kokoshin...

[Kokoshin] Purely an American joke. I wouldn't say I care for such a joke. I can say that an increasing number of members of both houses of Congress are seeking a positive response to the actions on the part of the Soviet Union. Over the past several years, Congress has refused to give the Pentagon funds for testing the antisatellite system on the F-15 fighter against real targets in space. As a result, last year this program was suspended. The U.S. Navy's shipbuilding program is being reduced; purchases of a number of types of military hardware are being decreased; and several military bases are being closed. But so far there have not been any radical changes in U.S. military organizational development. What is more, a series of types of military activities by the United States and NATO cannot help but cause the most serious concern and negative attitude.

[Agapova] I know you have had the opportunity to meet with many national security advisers of U.S. presidents. These observations were the basis of the book "Gray Cardinals of the White House" [Seryye kardinaly Belogo doma] co-authored by you with S. Rogov.

[Kokoshin] The position of national security adviser is a purely American phenomenon; there is nothing similar in other countries. A close look at his activities helps to understand better the mechanism of foreign policy decision making at the highest level of state power. To understand the behind-the-scenes aspects of this mechanism. Remember Cardinal Richelieu of France had an immediate assistant, the "gray cardinal" Joseph, who never appeared on the proscenium, but drafted and suggested all of Richelieu's decisions. We talked about "gray cardinals" of our time—assistants to U.S. presidents in the 1960s-1980s. These were Richard Allen and McGeorge Bundy, Walt Rostow and William Clark, Henry Kissinger and Zbigniew Brzezinski, Brent Scowcroft and Robert McFarland. On the scale of rank, the assistant for national security ranks below all cabinet members, that is, below the secretary of state, secretary of defense, and so forth. But in actuality, he often possesses considerably more power than a secretary. He has splendid conditions for access to the president. As the Americans say, he has the "president's ear." His office in the White House is next to the president's Oval Office.

[Agapova] You said that there is nothing similar to this position in other countries, but I will be so bold as to draw another analogy: Today you have duties which, I believe, no one else performs anywhere. I have in mind the GON—the Group of Public Observation of the Reduction of Armed Forces and Arms, which you head.

[Kokoshin] In my opinion, that is too bold an analogy. But I would note that our public has never had a real opportunity to intrude into the affairs of the military department. Moreover, the relations between the army and the public were always strictly regulated. On the other hand, each of us is dominated by the stereotype of super-secrecy

in the army, its departmental closed nature, to which we have grown accustomed over the years. Our group, which includes representatives of various public organizations and USSR people's deputies, has a number of ideas concerning what must be done to improve the situation of all who have honorably served and are being discharged today. Now we are working on these proposals, which we will submit to the country's highest body of power.

[Agapova] I would like to know, how are your relations with the General Staff structured, and how trusting are they?

[Kokoshin] We have already met several times with Army Gen M.A. Moiseyev. He understands our job. The General Staff informs us of the amount of equipment and arms being withdrawn from the groups of forces. Incidentally, there were times I had occasion to hear sometimes angry questions of some people in the military who perceived the work of our group as some show of almost distrust in the army. But the attitude changes when you explain that the GON is primarily looking for ways to solve social problems that arise during the reductions in the armed forces. The group has a clear opinion: We also need to help the army today, and not just hold it accountable. With all the cuts and changes, we need a strong and efficient Army and Navy.

[Agapova] The families of service members often have to be relocated into an unsettled life. What do you see as a solution to this situation?

[Kokoshin] In my view, a special state program is needed. By the way, in the United States they have a separate appropriations item for military construction and a separate item for construction of housing for service members. This year, \$3.7 billion has been allocated for the latter. No one can switch this money to another item. I would like to have a clear picture of how we do this.

[Agapova] Andrey Afanasyevich, many of those with whom you have talked, including military people, note that you know very well the life of service members, its day-to-day aspect. Your view of the army's problems is clearly not the view of a person not directly involved.

[Kokoshin] I know the life of the military not from hearsay. I was born to the family of an officer. All the men in our family were military men, and not in one generation. My father participated in the Victory Parade and served in the military for more than 40 years. My uncle is still serving in the armed forces. My grandfather on my father's side fought both in the Civil War and the Great Patriotic War as a rank and file soldier. But perhaps my uncle—Vadim Vladimirovich Chudov—saw the most combat in our family; he fought in the Baltic in the naval infantry. I myself wanted to become a sailor when I was young and was infatuated with military history. My father believed that if I wanted to become a military man, I first should get a fundamental engineering education. Thus, after first working for a while as a lathe operator at an aviation plant, I entered the Moscow Higher Technical

School imeni N.E. Bauman. As a student I became infatuated with social sciences. As a result, after completing the postgraduate course, I became a historian and specialist in international affairs.

[Agapova] What, in your opinion, needs to be revised in the army?

[Kokoshin] Unfortunately, quite a few of the young officers I have met are thinking about getting out of the army now while they are healthy and young. Young officers, one gets the impression, today are in a more difficult material situation compared with certain other young specialists being let out into the national economy. Therefore, it seems to me, today we should first of all be concerned about the fate of the young officer. In my view, it is quite necessary to increase the quality of his education; I have in mind primarily general education, not purely military. Why not bring in prominent civilian scholars to teach at military educational institutions? In other words, it is a matter of sharply increasing the intellectual level of the army. It is very important today for an officer to have a well-rounded perception about the history of the Russian as well as the Soviet state, to know both the glory and the tragedies and miscalculations.

[Agapova] You are the author of 11 monographs and are involved in much social activity. But recently the newspaper SOVETSKIY SPORT wrote that Andrey Kokoshin plays... rugby and even went out for a team in the top league.

[Kokoshin] I have two attachments in sports—boat-racing and rugby. For several years I was involved in rowing almost professionally, as they say now, and was even in the Olympic reserve. True, I have retired, but my partner, Misha Chekin, incidentally, became the European rowing champion a year ago. Now I play rugby on the "Lokomotiv" club team. This wonderful game, contrary to widespread opinion, is not just confrontation involving strength. It requires tactical thinking, collectivism, and at the same time leaves room for a player to demonstrate individual qualities. I would like to take advantage of this occasion to say that I consider rugby to be a very appropriate sport for military units. It is namely sports that help one succeed in many things.

[Agapova] We must, in addition to other successes, wish you new sports achievements. Thank you for the conversation.

#### **LiSSR Supreme Soviet Discusses Report on Military Service**

90UN0086A Vilnius SOVETSKAYA LITVA in Russian  
4 Oct 89 pp 1-3

[Speeches at the 30th session of the 11th Convocation of the Lithuanian SSR Supreme Soviet by Algimantas Visotskis, Alfredas Smaylis, Zofiya Belitskene, and Grigoriy Krivosheyev: "Debate on Information Concerning the Military Service of Citizens of the Republic"]

[Text]

### Speech by Deputy Algimantas Visotskis

Dear Comrade Deputies! After hearing the report of Yu. Antanaytis, the chairman of the republic's Commission on Matters Concerning the Military Service of Youth, I want to note its complete objectivity. The Central Committee of the Lithuanian Communist Party, the Council of Ministers of the republic, the cited commission, and social organizations gave effective assistance to the military commissariats of the republic in resolving many problems associated with the service of youth in the armed forces.

Perestroika is taking place in the armed forces regardless of whether we want to admit this or not. True, it is taking place very quietly and slowly, but it is taking place. Both the city and rayon military commissariats are changing their methods and style of work.

More than 50 percent of our personnel have been replaced. A lot of young and energetic people have been accepted, and among them there are more Lithuanians, or those who have a good command of the Lithuanian language and who know the history and culture of Lithuania. Articles and interviews with officers of military commissariats, in which they talk about their problems frankly, are appearing more frequently in the republic and rayon press. Meetings are being held with the mothers of soldiers, and there are open-house days and other measures. Visitor reception days have been established in all military commissariats—on Tuesdays and Thursdays until 2000 hours, and on Saturdays until 1500 hours.

It appears that jointly with the government of the republic and social organizations we were able to achieve some changes in pertinent documents that regulate the procedure for the call-up of youth into the army and the performance of service. Thus, amendments have been made to 15 items of the Order of the USSR Minister of Defense No 260 "On the Introduction of Provisions for Medical Examinations in the USSR Armed Forces." As a result, about 800 youths will not be called into the army this autumn for reasons of health. We were able to transfer some youths, against whom acts of violence and outrageous treatment were committed, to other units or districts—to the Belorussian, Baltic, and Moscow Military Districts.

We were able to arrange it so that servicemen returned from crop harvesting earlier—25-29 September, i.e., their period of service was reduced from 180 to 90 days. We are now preparing a letter to the USSR Minister of Defense about negative facts in military units respecting the youth of our republic that are well-known to us.

Today I want to dwell on unresolved problems. Such as the preparation of youth for service, military patriotic education, and call-up to active military service and to training and special camps. They have a negative effect not only on the internal work of military commissariats, but also on the attitude of the population, the leadership of the republic, and the rayon managers toward the military

commissariat. I want to say that we cannot by far independently resolve all of the problems that have piled up.

I will note some of the most important problems which were raised recently by residents of the republic. First, the special call-up, which is conducted by a decision of the government of the USSR for the elimination of the effects of natural disasters, and also for providing support for harvesting crops in those rayons of the country where there is not enough manpower. We do not agree that assignment to work in other rayons is an obligation of the military commissariats. In our view, if persons who have a military service obligation—workers in the national economy—are called up according to the decree of the USSR Council of Ministers and the Lithuanian SSR Council of Ministers then this must be directly decided by local soviet organs or ministries who have an interest in this. In this event, the problem of wages for these workers would be decided.

Second, defense training measures. At the present time, the military commissariat of the republic receives letters and statements from managers of enterprises, work collectives, and the population that express dissatisfaction with the call-up of skilled workers for exercises. It is surprising that now, when enterprises are switching to economic accountability, that a person with a military service obligation must receive an average wage for unfulfilled work. We approve such an opinion and have repeatedly raised the question with the high command. But there is no decision yet, which is indicated in a letter of General of the Army M. Moyseyev, chief of the general staff, replying to a query by V. Sakalauskas, chairman of the Lithuanian SSR Council of Ministers, and the letter to my query. M. Moyseyev reports that the USSR Council of Ministers, under whose jurisdiction this falls, did not approve the initiative of the USSR Ministry of Defense. In the opinion of the USSR Council of Ministers, in reaching a decision on these questions, it is necessary to be guided by the currently applicable USSR Law "On Universal Military Service." We think that this is incorrect.

Taking into account that our republic is an agricultural one, the military commissariat has turned more than once to the military council of the Baltic Military District with a request to intercede with the General Staff of the Armed Forces about conducting training camps later in autumn or winter. Here we achieved something. As you noted, a majority of the camps which were to have been conducted this year in July, August, and September were postponed until October-December. This was done with the assistance of A. Brazauskas, first secretary of the Central Committee of the Lithuanian Communist Party, and V. Sakalauskas, chairman of the Lithuanian SSR Council of Ministers, who appealed to the General Staff and to the commander of the military district.

The third problem. Complaints are coming in about the diversion of citizens from their main work in the event of a call-up for active military service, where they are charged with the performance of technical work in military commissariats. I want the deputies to understand me, we function on the basis of Article 32 of the USSR Law "On Universal Military Service." But we are trying to draw on fewer technical workers, and we are utilizing their services

only in the event of extreme necessity. Military commissariats also observe the established schedule strictly. All of this is done being guided by a resolution of the Soviet of People's Deputies and an agreement with the managers of enterprises, establishments, and organizations.

The fourth problem. This is the so-called "dedovshchina," [hazing of conscripts by more senior soldiers] insults, and disorder in individual military units. Although a resolution of this problem is not officially a function of military commissariats (military units are not subordinate to us), but inasmuch as it is the sorest problem in the army, we get more and more letters and appeals from parents of soldiers, and also from the Central Committee of the Lithuanian Communist Party and the Council of Ministers of the republic, from the Commission on Matters Concerning the Military Service of Youth of the Lithuanian SSR Presidium of the Supreme Soviet, and other public organizations. That is why we give so much effort and time to this problem. We have just recently received 520 letters of this kind, and we explain each case, and we report to the pertinent Directorates of the General Staff, military districts, commanders of large units [soyedineniye] and units [chast]. We have now changed the style of work—we immediately report this to the military procuracy.

Recently, under conditions of such a political situation in the republic, we received 112 collective letters from various units deployed in the European part with a request to transfer soldiers so that they can perform their service in Lithuania. It should be said that such a possibility does not exist now. They have to serve there where they were assigned.

When possible, we make telephone calls, send telegrams, and ask for assistance. On the whole, unit commands react with understanding and try to look into the situation that has arisen in a unit, and they take steps. I already said that in certain cases we are able to get soldiers transferred to other districts, and we are able to arrange for thorough medical examinations, etc. We often get thanks from parents and the soldiers themselves. But there were cases of biased information, and facts were not always corroborated.

Beginning this autumn, we will do everything so that conscripts who are married and have children will be assigned to service near home. With respect to orphans, there is an understanding with the chairman and members of the commission. We will find a way so that orphans, if they themselves do not want to serve abroad or in other places in the country, would be able to perform service in Lithuania or in the Baltics. There are not that many of them, and it is necessary to help these people.

I would want you to understand that the so-called "dedovshchina" is not only a product of the army. Not removing responsibility for this evil from the military, I will say: This is a result of our general illness. For the armed forces are a part of society. And if the society suffered with this illness for decades, the process of

recovery goes that much more slowly, and it is not difficult to understand why low-quality replacements frequently come into the army.

We are troubled by the appeals of some social organizations to return military service cards, comparing the army to a prison, and appeals not to serve in the army. It hurts to hear this, especially in autumn. I will cite some figures. There were 419 such statements: from reserve officers—29; from sergeants and soldiers—255, and from conscripts—135 statements that they do not desire to serve in occupation forces. I want to note that now, when call-up commissions are working, young men pass and remain quiet about the fact that they submitted statements. Mama's bring many of them, because they understand that a youth should perform his military obligation. The mama's are only concerned that their children are not beaten up, and that good conditions are set up for them. Therefore, I ask the deputies for help in this, so that those who turned in statements would not resort to a lawyer. If the law on the performance of service in Lithuania is passed, they will serve in Lithuania, and if the law is passed in Belorussia, they will serve in Belorussia.

I appeal to the deputies of the USSR Supreme Soviet who are disturbed by this: Be just as insistent in Moscow also. You discussed economic policy, but why were you silent on the call-up for the virgin lands, Chernobyl, and others? Please understand these questions, and help us.

We understand that a lot has to be changed in the work of the military commissariats—we will do this, and we will search for ways of resolving those problems that have come to a head. I would like the Commission on Matters Concerning the Military Service of Youth under the Presidium of the Lithuanian SSR Supreme Soviet to pay more attention to the preparation of young people for military service, to support ties between military units and parents of soldiers, to look into conditions of work, training, and the everyday living of the youth, and to be concerned about the families of soldiers. Apparently, it is necessary to pay more attention to the Komsomol [All-Union Leninist Communist Youth League] organizations, especially in general education schools and vocational schools, to look into the work of medical commissions, and to help them in assigning youth to the armed forces.

#### Speech of USSR People's Deputy Alfredas Smaylis

Dear chairman, dear colleague deputies, according to the available data—such as that presented by A. Visotskis—200 youths of call-up age have already turned in their military service cards. And another 700 in the reserves. Thus, it can be said that these people live in fear, on the border of legality and illegality, and they can become social detonators in our society. In deciding the question of their status, we have to give this fact a lot of attention. Especially since this is also connected with the future call-up of the youth of Lithuania for the Soviet Army. Because, after learning that in 1990 youth will serve in Lithuania, a part of those who are now receiving their draft notices may turn in their military service cards. Therefore, I think it would

be advisable to note in the resolution that the group of young men in the current call-up also will be able to serve in the Lithuanian army.

I would like to propose broadening the concept of alternative services. Not only religious services and not only work in hospitals, but also work in militia organs should fall under this concept, and, possibly, even construction battalions that are located in Lithuania in which the young men might work. Very likely, this question should be resolved with the problem of people who are in a semi-legal status. The legal evaluation of their activities should be entrusted to Lithuanian law enforcement organs. This is demanded by people at mass meetings and by the mothers of the young people.

One more comment. The respected S. Kashauskas said that there is one general for every 700 soldiers in our army. This is more than there was in the Saigon army. There, there was one general for every 900 soldiers. The whole world laughed when they fought against the people's front of North Vietnam—there were less generals on the North Vietnam front—and they were the first to lose the war. I asked the respected A. Visotskiy how many youths—citizens of Lithuania—serve in the Soviet Army? It turns out there are 36,000. This means there should be 51.4 Lithuanian generals. This attests to the fact that our soldiers are discriminated against in promotions because of nationality. If there were more officer Lithuanians, the questions of military service and conflict with Lithuanian youths would not be so critical.

#### Speech of Deputy Zofiya Belitskene

On behalf of the farmers, I would like to make a request and a proposal: Exempt from service in the Soviet Army youths who grew up in a village and who graduated from agricultural technical schools, and also youths who want to work in agriculture or to establish an independent peasant farm by concluding an agreement with the farm on future work. In any case, they have found a clever way out of the situation: They enroll in an academy and study for 5 years.

#### Speech of Deputy Grigoriy Krivosheyev

Dear Comrade Deputies! I would like to dwell on several of the provisions of the proposed documents and to answer a number of questions.

First. The resolution of the Lithuanian SSR Supreme Soviet concerning the call-up of military reservists of the republic for training courses. It is written here in subparagraph "A": Prohibit the USSR Ministry of Defense from calling up military reservists for training courses, etc.

Every such decision and every measure is conducted according to the Ukase of the USSR Supreme Soviet and a decree of the government. There was an Ukase which compelled us to make call-ups and assignments to Chernobyl, Armenia, Sverdlovsk, and other places. Therefore, this question could have been and should have been stated, it seems to me, in this way: Introduce changes in the USSR Law on Universal Military Service and to stipulate disapproval or approval (this should be decided by people's

deputies) of the government to recall persons with a military obligation to perform tasks that are not connected with military service.

And on a second resolution. The question comes up about the fact that Lithuanians should serve in Lithuania, Latvians in Latvia, Estonians in Estonia, etc. I would like to clarify this. The territorial principle of manning the armed forces of the USSR, which was talked about in the report and in speeches, of course, has certain advantages at first glance in comparison with the ex-territorial principle—it reduces the volume of transport, and it keeps the conscripts in climatic conditions and in an ethnic environment to which they are accustomed. In this connection, we are trying as much as possible to let the conscripts perform their military service in their own regions. You know that 25 percent of the conscripts from Lithuania remain in Lithuania. However, it is practically impossible under present conditions to ensure that all youths will perform military service according to their place of residence. There are a number of sufficiently weighty reasons for this.

First, the need of the armed forces for human resources by regions, which arises from necessary deployments, absolutely does not correspond to the presence of conscript pools in these regions. The extreme North, the Far East, the Transbaykal, and other regions, troops beyond USSR borders, and also naval forces, do not have local sources of conscript pools.

Second, the performance of service in the place of residence is unacceptable in a number of cases due to the absence of the necessary number of military units. I will not reveal a big secret if I say that there are not enough forces in the Baltic Military District to assign Lithuanians, Latvians, and Estonians to them.

Let us also think about it this way: Will we not infringe upon the rights of our young people, and will we not impoverish them spiritually, if we obligate them to serve, figuratively speaking, across the street from home? But if they want to see the country, to serve beyond the borders of our country, abroad, and to be enriched culturally? Many of those sitting here, very likely, studied not only in Vilnius, but also in Moscow, etc. Why do we impoverish the youth?

And third. The protection of the state is a national matter. It cannot be resolved in a proper way within the framework of regional and republic isolation. This proposition was also reflected in the resolution of the USSR Congress of People's Deputies, for which you, Lithuanian deputies, also voted. It says that as long as there are no firm guarantees of the irreversibility of the positive changes that have begun in the area of disarmament and strengthening of verification measures, the assurance of a reliable defense of the country is one of the most important functions of our state. The congress came out for the further qualitative development of the Soviet Army in accordance with the principles of its formation that are in effect.

It is generally known that the armed forces of the USSR are formed on a multinational basis, i.e., all citizens, irrespective of national affiliation, must perform military service in accordance with all-union laws. This was also confirmed by the September plenum. I cannot help but note that service in the entire territory of the USSR and beyond its borders is a question of justice and the equality of citizens of our country. And if we want to create a law-governed state, the citizens must be equal. If everyone will demand a place of service at home, or near home, then this will be very complicated. Because troops are deployed where it is convenient and better, but in such a way that the Motherland can be protected against any threat, wherever it might originate. As Private Tautynsh of the PVO Troops [Air Defense Troops] expressed himself in his letter: "Our sky cannot be divided into Uzbek, Lithuanian, Latvian, or Belorussian. For us it is one, and we have to defend it together."

As I understand, we have a special interest in how youth that are drafted from Lithuania are distributed and where they perform their service. It was already said here that at the present time 36,000 soldiers and 1,280 Lithuanian officers serve in the army. Of these, 40 percent serve in the ground forces, 23 percent in the missile troops of the PVO, 11 percent in military construction units, 10 percent in the navy, and 11 percent in troops of the MVD [Ministry of Internal Affairs], the KGB [Committee for State Security], and the railroad troops. On the whole, 75 percent of the Lithuanian youth serve in combat units that require good training and high skills. Eight percent of the Lithuanians serve in the Baltic Military District and neighboring military districts, and only 20 percent in more distant places: 7 percent in the eastern part of the country, 8 percent in the south, and 5 percent abroad.

A majority of the conscripts of Lithuania perform their military duty conscientiously, both on the territory of the republic and beyond its borders. Just last year one out of three Lithuanian soldiers got leave in their homeland. I must say that Lithuanian soldiers also performed their military duty in Afghanistan exceptionally conscientiously.

The dread of regulation-violating treatment of servicemen for ethnic reasons, in my view, is no longer warranted. This dread shows up in cases of unhealthy, and at times harsh, relations between individual soldiers and sergeants, not so much because of ethnic dissension but because of the low level of education of our youth.

The next question concerns ethnic formations. To conduct a discussion on this question, it is necessary to take a considered approach and a detailed account of both objective and subjective factors. When the question concerns ethnic formations, speakers frequently refer to the years 1918-1937, the year 1941, and the middle of the 1950's. We all, very likely, know that the army at that time was always multinational in its composition. The number of servicemen from an indigenous population did not exceed

30-35 percent. For example, indigenous persons constituted 24 percent of the 16th Lithuanian Division, which was formed in the middle of the 1950's.

But let us now look at this problem from a military organization standpoint. First, a contemporary motorized rifle large unit [soyedineniye] or MPVO [local Air Defense] are not the same units from the standpoint of technical equipping that they were during the years of the Great Patriotic War. A reliable defense of the country now requires missile troops, air forces, a navy, and other services and branches of troops. They cannot be deployed on a limited territory under modern conditions. Second, where are specialists to be trained? Let us analyze this. For example, there are 1,800 specialties in the ground forces alone, and in the armed forces overall there are 5,000.

Specialists are trained in training centers located in all regions of the country. As an example, you have a training center to train airborne assault troops. After 5-6 months of training, they are distributed to all forces located on the territory of the Soviet Union and beyond its borders. Latvia has a motorized rifle and tank training center. It also trains and distributes specialists to all large units and units. I have already said that those units that are located on Lithuanian territory have been reduced to the limit. But should the time come (god forbid that this should happen) when it becomes necessary to deploy units, people will not be transported here either from Belorussia or from other localities, but Lithuanian soldiers will go to those units.

It is well-known that a decision has been made to cut the armed forces by 500,000 persons. This year we will cut by 240,000. And at the same time, it is proposed to deploy national formations, but the people's deputies know that questions on the reduction of the budget of the armed forces are continuing to be decided at sessions of the USSR Supreme Soviet. Of course, the Supreme Soviet has the right to make a decision that the republic allocate some resources to national formations.

We clearly understand and sincerely share the grief of mothers who have lost their sons. In 10 years, 10 persons perished in the Baltic Military District. In 10 years, in the Moscow Military District—9 persons perished, in the Leningrad Military District—8, in the Siberian Military District—7, in the Maritime [Primorskiy] Military District—6, and in the other districts—one person each. That is, more perished closer to home. Although, they say that it is better to serve at home. We appreciate the immensity of the responsibility to preserve the life and health of people. Regarding the measures that have been undertaken, believe me, they are very strict.

At the same time, you will agree that to think that all of this was engendered only by the army would be incorrect. It is now fashionable to criticize the party and the army, and those who criticize more earn great prestige for themselves.

I will cite some negative facts. For example, the growth of crime among young people. Almost 3,000 youth of draft and pre-draft age are on the militia records for breaking the law. This year conscripts committed 705 infringements of

the law and crimes, and, all told, minors committed 1,119 law violations, or 45 percent more than last year for this period. But, you see, these young people come into the army. Military commissariat records show 1,506 conscripts who were convicted of various crimes. Part of this group is also called into the army. In the last 2 years, Lithuanian youths, unfortunately, committed 62 crimes, which includes 17 who were convicted previously.

One can also agree with some of the proposals made here. The Order of the Minister of Defense No 260. It has been revised, and sick persons will no longer be called up. But it must be said that not the best doctors are assigned to our commission. And it was said correctly here that it is necessary to announce the lists, and what kind of doctors are assigned to these commissions.

And the last thing. By an order of the Minister of National Education of the Lithuanian SSR of 13 June 1989, lessons in basic military training in the senior classes and in the PTU [vocational training school] are canceled, and the staff of military instructors is being abolished. Instead of this, it is planned to conduct lessons in so-called inter-school centers in a joint program, and instead of 140 hours, there will be 70 hours. For the time being, neither the centers nor the teachers are ready for this work. It seems to me that the question has been stated incorrectly.

We say that there are not enough Lithuanian officers in the army—all told 1,280. If national formations are created, who will command them? For example, only 188 persons enrolled in an officers school in 1987. In 1988 there were 124, and this year there are only 93. And the acceptance plan for republic special boarding schools has been fulfilled by only 16 percent.

Our children and grandchildren serve in the army, and, understandably, it is not they who are responsible for what happened earlier. A soldier cannot go on pass in Lithuania without hearing shouts of "occupier." What does it matter whether he is a soldier or an officer? And taking down monuments in Kaunas? They removed a tank. Is this culture?

I want to say that we have to resolve many questions together.

### **Maj Gen Zakharov Seeks to Calm Rumors on Death of Uzbek Soldier**

90UM0051A Tashkent KOMSOMOLET  
UZBEKISTANA in Russian 7 Oct 89 p 2

[Interview with Major General A.I. Zakharov, member of the Military Council, Chief of Political Administration of the Red-Banner Turkestan Military District, by an unnamed Uzbek Telegraph Agency correspondent: "The Truth Which Hurts"; date, place, and occasion not specified]

[Text]

[Correspondent] Aleksandr Imametdinovich, it is with a lot of emotional pain that we have asked you for this

interview. Rumors circulate to the effect that in the Armed Forces the killings of Uzbek soldiers were caused by the "anti-Uzbek campaign" in the press following the Fergana events.

[Zakharov] I must state with complete responsibility: The facts provide no foundation for such a conclusion. As far as the rumors go, they are spread by certain circles which try to fuel ethnic discord in this manner.

[Correspondent] You have mentioned facts.

[Zakharov] First, about the problem on the whole. Unfortunately, people are mortal both in "civilian life" and in the army. We also have diseases, accidents, and—I would not conceal this—crime.

Therefore, the facts. Believe me, I am ashamed to give them. For 33 years, I have been within the army cadres, and I have seen a lot of blood and death, particularly in Afghanistan... Here I am, forced for the first time to "segregate" the bodies of soldiers by ethnicity. It is painful and frightening to be involved in this unworthy business. Every soldier is our son, and the death of every soldier is a loss to the entire people. I understand that it is cruel to rub salt into the emotional wounds of fathers and mothers by statistical data next to fresh graves. However, what can we do—we are being forced to do so.

We have compared data on the number of draftees from Uzbekistan who died while serving in the USSR Armed Forces in the [first] 9 months of 1989 with the same data for 1988, and there have been no changes. Any growth of the death rate among our draftees in the army is out of the question. Therefore, there are no additional causes of death at all. We have studied separately the statistics of death rate among draftees from Fergana Oblast over the last 4 years. I must say that this number is going down steadily. At present, it is almost 1.5 times lower than in 1986.

We have analyzed another aspect as well, in our, Turkestan District. From the beginning of the year, a certain number of soldiers have died here (I am naming them in the descending order of numbers): Russians, Ukrainians, Kazakhs, Uzbeks, and other nationalities. The causes vary—disease, electrocution, carbon monoxide poisoning, traffic accidents, careless handling of weapons, and other. However, there has not been a single case of violent death.

[Correspondent] What does the careless handling of weapons amount to?

[Zakharov] Most frequently, this is what happens. While on guard duty, a soldier should not unnecessarily put the round in the chamber of his weapon. However, the soldier, especially if young and inexperienced, is nervous, and pulls back the bolt just in case. Later, when clearing his weapon, he disengages the magazine having forgotten about the round left in the chamber... A shot may occur from which someone next to this soldier suffers rather than the soldier himself. This is how Private T. was killed by his friend Private Kh. Both of them are Uzbeks. I am not naming names because the young man who has died cannot be

brought back. As far as the one who has carelessly allowed the fateful shot to occur is concerned, we do not have to explain how traumatized he is, how horrible he feels. After all, he has yet to face a military tribunal and criminal charges. Of course, the officers who did not ensure the proper performance of guard duty have also been punished severely.

[Correspondent] How can a person be killed by electrical current?

[Zakharov] If you mean Private Ilkhomdzhan N., he decided to shorten his way by cutting through a heavily guarded zone surrounded by an electrified fence as he was returning from his AWOL. Hence the tragic result.

[Correspondent] The first and last names of this young man have been placed on the list circulating in the city which I can also see on your desk.

[Zakharov] We have checked every line of this list. Judge the quality and objectives of this document for yourself. Mamazhon Saidbayev from Namangan is named among those "given a medical discharge as a result of beatings." He has not been given a discharge; he is still in the service. The problem is that he had not been writing letters home. The commanders talked to him asking to stop making his relatives nervous and behave like a son ought to. Incidentally, Mamazhon's brother has also been drafted now from the same family. He is also doing all right.

Another person "given a medical discharge as a result of beatings"—Takhir Madinov from Namangan. A man with this name has never served in the military unit indicated by the "informals." He is not registered at the home address given by them either...

[Correspondent] However, there are also authentic facts in there, including non-regulation relations in the army.

[Zakharov] Yes, there are. However, the facts have been by and large compiled in a biased manner, e.g., on the death of Private Akhrordzhan T. who was serving in one of the military districts due to the head-and-skull injury. The "informal" list keeps silent about the fact that criminal charges have been filed against the squad commander Pivovarov who hit the soldier, that he is being investigated, that the unit commander has been convicted by the officers' court of honor, relieved of command, and his discharge from the Armed Forces is pending... Many such examples of distorting the actual state of affairs may be given.

Indeed, non-regulation relations are a painful problem for the army. However, see this: This is a fresh report on such a case in our district. It is addressed to the minister of defense and the chief of the Main Political Administration. It is signed by the troops commander and me, a member of the Military Council and head of the Political Administration of the district. The level itself shows the frequency of such cases. If this were a mass phenomenon neither the minister nor us would have any time to give attention to service.

As far as the case in question is concerned, as you can see, direct culprits were not punished only at the request of the father of the soldier whom they have wronged; the father was invited to the unit. Despite this, a number of commanders and chiefs, from deputy battalion commander to the large unit commander, have been severely punished.

The issue of non-regulation relations is not simple, primarily because it is brought to the army ready-made from "civilian life." Responding to our questionnaire, 80 percent of the soldiers polled who have graduated from vocational technical schools stated that there was the mistreatment of juniors by seniors in their schools, and 50 percent—that there were beatings and extortion there. After all, graduates of vocational technical schools account for more than a quarter of our replenishment. You, the press, write about increases in youth crime. As far as the army is concerned, this means that the share of individuals who have previously committed a crime among the draftees is increasing. You write about the issue of job placement: For the army, this means that 10 percent of draftees have not worked anywhere yet. In recent years, many such factors have appeared which complicate the political and indoctrination work with the troops.

Nonetheless, a trend has now emerged toward a decrease in crime in the units of our district and in the Armed Forces as a whole. This gives us hope: It means that the commanders and political officers of the army realize the complexity of new tasks and are applying themselves in order to accomplish them. This means that the army has been and remains a school of life for our young people—the role of which at present is as great as ever.

[Correspondent] Comrade General! You are one of those who have lived through the Afghan war, a tragic one for our people. Tell us how the citizens of Uzbekistan showed themselves there.

[Zakharov] Over there, we did not look at what nationality one was. I have already said that I feel awkward due to the very manner in which the question is put. Still, as I recall what happened, I will say that the awards did not rain from the sky. They were given for courage and proficiency in combat, for the sweat and blood of soldiers, for being faithful to the oath. Tens and hundreds of Uzbek soldiers came home decorated with medals and orders, including the highest awards of the USSR.

At this time, thousands of Uzbek young men serve in the units of the Turkestan Military District. They serve honestly, diligently, and skillfully. These thousands are the children of the people, the people itself, its future. The army is grateful to them and their parents who have brought up a worthy replenishment of defenders of the motherland.

**Kireyev: Questioning Amount, Components, Validity of Defense Spending***90UM0071A Moscow LITERATURNAYA GAZETA in Russian No 42, 18 Oct 89 p 11*

[Article by Aleksey Kireyev: "Secret Article: In the Dossier of the USSR Supreme Soviet"]

[Text] The figures of the defense budget, for which the deputies of the previous Supreme Soviet automatically voted, have fluctuated between 17 and 20 billion rubles for several decades.

At that time, no one was particularly interested in how, with only 20 billion rubles and our inefficient production, we managed to maintain strategic parity with America, whose military expenditures were constantly increasing. The myth about "cheap" defense eliminated this concern, and some people began having hopes that, being "ahead of the entire planet" in sphere, we sooner or later would outdo the imperialists. Especially since the swelling of military expenditures, as our own correspondents in various rich countries assured us, would lead to universal popular indignation.

The prophets were mistaken. The economic upsurge, going on for several years now in the capitalist economy, is getting along quite well with the growing expenditures for military purposes. But the socialist economy, including that of the Soviet Union, on the contrary, grew more stagnant with each year, the rate of growth dropped, and expenditures "for defense" played no small role in our spending spiral.

April 1985 changed much in this area. Already in August 1987, from the rostrum of the International Conference on the Interrelationship Between Disarmament and Development, we stated our readiness to make public complete data on the Soviet budget. True, we noted that they still would not be comparable with similar indices of Western countries due to differences in the structure and the system of price formation for military products.

Nevertheless, we must fulfill the commitments made before the world public, and the state budget deficit hung over the economy like the sword of Damocles. The Congress of People's Deputies took a decisive step forward: For the first time in the entire postwar period, M.S. Gorbachev announced the real figure for Soviet military expenditures—77.3 billion rubles in 1989.

Is this large or small? For the USSR it is clearly large—almost 9 percent of the gross national product (GNP), which is comparable with the similar index of such countries as Saudi Arabia, Israel, Oman, Qatar, and Jordan. In the United States it is about 6 percent (true, the American GNP is 2-2.5 times higher than ours). But in some states, such as Japan, it is not over 1 percent.

The figure for Soviet military expenditures was calculated long and strenuously. The fact is, these budget allocations are listed for departments engaged in the production of some or other equipment of a military purpose. As far as we can judge from press reports, besides the Ministry of

Defense itself, the Soviet military industrial complex also includes the Ministry of the Defense Industry, the Ministry of Medium Machine Building, the Ministry of General Machine Building, and certain others. Now, by decision of the Congress, the number of departments has been reduced, but the number of suppliers for the military has remained the same.

We learned from N.I. Ryzhkov's address at the Congress that our military expenditures are split up into six basic items: purchases of weapons and equipment—32.6 billion rubles; military scientific research and development—15.3 billion; maintaining the Army and Navy—20.2 billion; military construction—4.6 billion; pensions for service members—2.3 billion; other expenditures—also 2.3 billion. Military expenditures for space (3.9 billion), which accounts for more than half of all expenditures for space programs, is financed under a separate item.

"Old habits of secrecy and deception..." the American newspaper THE WALL STREET JOURNAL reacted quite harshly to the publication of these figures. "Whoever forgot these in assessing Moscow's statement is taking a big chance." The harshness, perhaps, is excessive, but the doubts are understandable: After converting to dollars, even at the official exchange rate, these figures are 1.5-2 times less than estimates they have become accustomed to in the West. But if converted at the actual rate of exchange, the difference is even greater. Therefore, Western experts also have doubts: Are the Russians hiding some items of their defense budget and understating the size of others?

Nevertheless, we have a figure. As the British newspaper THE FINANCIAL TIMES wrote: "It almost for certain was meant for internal consumption rather than for international analysis." Such an opinion is not without grounds given the lack of elaboration of methods for comparison, but I still think that the Western estimates of our military expenditures are overstated. Although not as much as presented in "their" press.

Indeed, on the one hand, the 4-million-strong Soviet Army is considerably "cheaper" than the smaller American Army. If you calculate the expenditures for pay and allowances not only of officers but also soldiers, they account for more than half of all military expenditures. In fact, in the Soviet Armed Forces, payments to service members are barely one-third of the defense budget. Our military equipment is supplied to the armed forces at the production price, but in the United States it is done at a price agreed to between the Department of Defense and the contractor, which is usually considerably higher than market prices for similar civilian products. Wages for workers in defense enterprises and the cost of raw materials in the USSR are also considerably lower than in the United States.

These are roughly the arguments which are supposed to prove that the Soviet military budget should be lower than both the Western estimates and the American military expenditures. However, there are quite a number of factors that tend to increase the figures of our defense expenditures. Above all, this includes the lower level of labor

productivity than in the United States, including in the defense industry, as a result of which each ruble invested in military construction gives a small material return in the form of a finished product. Therefore to obtain comparable results, we must make capital investments, I think, 2-3 times higher than in the United States

Those who claim that the American Army is "more expensive" often refer to the fact that the United States finances maintaining a 500,000-strong army overseas and more than 1,500 military facilities in 34 foreign countries. But, you see, Soviet troops are also stationed abroad.

The estimates of the efficiency of using resources in the armed forces themselves are also quite important. Our publications are full of reports about the negligent attitude toward military property, outright squandering and misuse of it. When a missile, due to impassable mud, hauls a milk can to a remote garrison, this means that on arrival the regular milk was transformed into an expensive elixir, and an endless sum of the people's money was drowned in the mud.

Discussion of military budget questions in the USSR Supreme Soviet can be objective only when the military departments are ready to present to the people's deputies a more detailed structure of their budget, up to and including individual programs. In the United States, for example, an attachment to the annually published "Budget of the Government of the United States" gives a breakdown by individual items and structures having a particular purpose, and the comments describe the specific programs involved. The armed forces and appropriations committees in the U.S. Congress discuss not so much the overall figure of military expenditures as the expediency of individual programs and projects.

But what of military programs are being implemented in the USSR today? It is not difficult to find this out, but again only from Western sources. Why? After all, declassifying them would not undermine security at all! The real secrets are on the level of equipment and technology, not macroeconomics, the indices of which can be calculated statistically. Much is simply visible from space!

Serious discussion of the military budget can be based only on a review of individual programs, an analysis of their financing, and the expediency of further implementation. A certain opinion has taken shape in the society about the need to reduce military expenditures. Without eliminating the budget deficit in the next 2-3 years, we will not be able to maintain even today's standard of living and level of production. And it is virtually impossible to eliminate the budget deficit without a radical reduction in military expenditures. Security in this case must be ensured not by the quantity but by the quality of the armed forces and arms.

Today, the task has been set to reduce the percentage of defense expenditures in the national income to two-thirds to one-half the current level by 1995. Military expenditures were frozen in 1987-1988, and in 1990-1991 it is planned to reduce them by 14 percent. But at the expense

of what programs can such a reduction in expenditures be accomplished? This question is constantly becoming the subject of discussion in the Supreme Soviet in one form or another, and during the course of approving the budget for next year it will be grounds for very serious conversation. The people must be confident that there will be sufficient funds remaining to ensure an absolutely reliable defense capability for the country given any changes in the international situation. I think that in examining the directions of reducing the military budget, it would be important:

- to abandon certain programs for building offensive arms by improving defensive systems;
- to reduce the physical volume of armaments, above all, outdated ones requiring large expenditures for material and technical servicing, while simultaneously improving their quality;
- to react asymmetrically to the actions of the opposing side by building simple and inexpensive defensive systems capable of neutralizing its expensive offensive armaments;
- to standardize as much as possible the armaments being produced and to reduce the number of classes and types of missiles, tanks, warships and aircraft being produced;
- to reduce the personnel strength of the armed forces and to quit drafting into army specialists of the national economy, students, and graduates of any VUZes, while simultaneously improving the system of civilian-environment reservist training.

In the future, when it becomes clear what resources our military industrial complex has at its disposal, we could also think about switching to an all-volunteer army. This thesis usually evokes objections from our military leaders, who counter it with the assertion that such an army would require an excessive increase in expenditures to maintain it. At first glance, this assertion appears indisputable, since we would have to pay wages to soldiers and build apartments for them and their families. In actuality, everything is not so simple.

The leadership of the Ministry of Defense has not yet submitted to the public its estimates of military expenditures for an all-volunteer army. But I still think that if we were to reduce the Soviet Army roughly by half, leaving the most educated, strongest, and most devoted to the cause, and not forcibly keep those who made a mistake in choosing this profession, if we were to send into the regular army most of the swelling number of military commissariats and reduce the number of military specialists from civilian departments, if we were to retire honorably the very old generals and concentrate military leadership in the hands of the young and dynamic who have practical experience and non-standard thinking, I am confident that we could use the savings not only to pay a proper wage to soldiers, but also considerably increase the salaries of officers. The profession of defender of the homeland must again become one of the most prestigious.

When the United States switched to an all-volunteer army, expenditures for maintaining it even decreased somewhat, and there have been no problems with recruiting in recent years. I see nothing reprehensible in Soviet officers and soldiers living in fitting conditions at home and receiving a decent compensation for professionally carrying out functions of defenders of the homeland.

In addition, one cannot help but see that an all-volunteer army will also yield an indirect savings—it will not be necessary to maintain a huge mobilization system and constantly (and for a short time) teach recruits military professions. Specialists will no longer be taken from their work in the national economy under the guise of all sorts of assemblies, and unskilled soldiers will no longer break expensive equipment. On the other hand, service members will no longer be called on to perform unrelated work; it will be done by those who are supposed to be engaged in agriculture, construction, and railroads. Then, I think, people like Rust will no longer land in Red Square, submarines will not sink, and military aircraft will no longer fly off in an unknown direction.

It is obvious that, under such a system, civilians must be ready to augment the armed forces at any moment, taking a position according to their military specialty (as close as possible to their civilian profession), and under the capable leadership of professionals provide qualified protection of the homeland.

Reducing military expenditures assumes that considerable funds will be freed for purposes of social and economic development. At the same time, the leadership of the General Staff has already suggested that the Ministry of Defense is not adverse to keeping the savings from reducing the military budget. The needs for which the military leaders are requesting money are more than serious: These include job placement and production retraining of officers and warrant officers transferred into the reserve, material and technical support for eliminating armaments, military equipment, ammunition, and expenses for conversion of production capacities, construction of housing for service members and their families, and increasing material incentives for military service. There may prove to be not even enough budget savings from reducing military expenditures to finance all these measures.

This does not at all mean that we should guard the budget savings like a hawk and give them to no one. On the contrary, they should be used as effectively as possible. I think that the bulk of the military budget cut should be used to finance some one socially important program—food, housing, consumer goods—provided there is a high profitability of each ruble saved. By this I mean that every ruble of saving spent for apartments, food products, or refrigerators should be returned to the budget after sale as a minimum of two rubles, thereby linking increasingly unissued and inflating money.

In supporting production by savings of highly profitable goods, we can also think about the partial writing off of the funds received in this manner, about financing additional

benefits, and about leaving part of the funds at the disposal of the Ministry of Defense. The former military enterprises that have been switched to specializing in peacetime goods during the conversion process are to play a significant role in this. I am confident that the highly technologically efficient enterprises of the military industrial complex are capable of marketing industrial and consumer goods which we practically do not have and for which there is an unlimited possibility of selling in our country.

The budget savings could also be used to finance the creation of export production capacities at these enterprises, including in the form joint companies with foreign partners. These enterprises could provide competitive products for the world market and, consequently, earn hard currency. Such a unique conversion of ruble savings into currency and its use to purchase highly efficient, world-level equipment is, in my view, a priority direction for using the funds from reducing the military budget.

We must as soon as possible disperse the fog which still surrounds the "secret" items of the Soviet military budget. Openness in this sphere and democratic control on the part of the public will make it possible not only to create the most logical concept of Soviet defense construction and protect against further waste of the people's money, but also to create a new atmosphere of trust in international relations and prompt Western countries to decisively consider reducing their military budgets. And this will by no means damage our defense capability; on the contrary, it can only strengthen our country's security. This will create financial incentives to switch from an economy of armaments to an economy of disarmament, to co-authorship in building non-violent international association and a mutually beneficial international division of labor.

#### **Veterans' Committee Protests Stalinist Implications of OGONEK Photo**

*90UM0071B Moscow VETERAN in Russian  
No 43, 23-29 Oct 89 p 2*

[Article by Soviet Committee of War Veterans: "We Protest!"]

[Text] The cover of OGONEK, issue No 41, contains a photograph depicting a war veteran, a colonel-tanker, on whose uniform are seven ribbons attesting to his seven wounds, three of them serious, and a order ribbon bar holder indicating his acts of gallantry in battle. But scathingly printed over his face and eyes are the words: "Stalin is with them!" The veteran's hands are holding, like an icon, Stalin's book: "The Great Patriotic War of the Soviet Union."

War veterans consider this photo to be a desire by the editorial board of OGONEK to picture the veterans of the Great Patriotic War collectively as supposedly stupefied by Stalinism and tightly blocked by the crude propaganda of the 1930s. The group of letters from veterans, under the heading "Why They Do Not Like Us", serves the same purpose. They say, read them and see for yourselves: The

veterans are monsters, reactionaries, people devoted to outdated, dilapidated stereotyped patterns and dogmata.

Thus the creators of victory in the Great Patriotic War are defamed, people who demonstrated in the war great nobleness, beauty of soul, and unprecedented mass heroism in the struggle against the wicked forces of fascism.

Of course, there are among the veterans people who live by old notions and dogmata, people who resent the censure of Stalin. But are there many of them? Comparatively few. But OGONEK, it seems to us, is trying to convince readers that most of the veterans are opponents of the perestroyka taking place in our country.

Veterans are opponents of perestroyka... What could be more absurd than this? The country's veteran community ardently supports perestroyka and is striving to do whatever it can to promote it. But, at the same time, it decisively opposes debasing and slandering the entire history of our party and the Soviet State. We are striving to see that our mass media reflect the events of history truthfully and objectively and that the criminal actions of

our country's previous leadership be separated from the heroic creative labor of the people and the personnel of the armed forces. But, obviously, this does not at all suit those who abuse the history of our country.

A legitimate question arises: Who needs the attempts by the magazine OGONEK to deprive an entire generation of participants in the war of an active position in life? Who needs this—to portray them as people with a servile psychology, people deprived of a sense of their own dignity? The malicious misrepresentation of veterans is clearly intended to disrupt the bond between generations, to alienate youth from them, to deprive the young people of the life-giving juices of patriotism and internationalism, and to wash away the socialist ideals proven in life. That is also why such a scornful attitude is being cultivated toward participants in the war and the older generation.

The Soviet Committee of War Veterans decisively protests against the distorted portrayal in OGONEK of veterans of the Great Patriotic War and demands an official apology to them on the pages of the journal.

### Role of Afghan Experience in Combat Training

18010897 Moscow KRASNAYA ZVEZDA in Russian  
17 Sep 89 First Edition p 2

[Article by Gds Lt Col A. Soluyanov, commander of a paratroop regiment and Hero of the Soviet Union: "I Am Against a 'Ladies' Education"]

[Text] Having reached the edge of the mountain gorge, one after another the paratroopers jump with full gear from the dizzying height to the small plateau. Only a few minutes pass, and they are already in extended line. The steady clatter of submachine guns resounds in the mountain gorge.

One day, an officer from higher headquarters, checking the regiment's combat training, told me with noticeable irritation:

"How can you carry out an attack with field firing that was not devised and scheduled by us. What are these circus stunts for? Can you imagine what would happen if one of the soldiers wrung his neck?"

This will seem strange: Knowing well the system of special training sessions in the subunits, I could not imagine one of the paratroopers slipping up in the exercises; but, to be honest, I did not argue with the inspector. First, we were not alone; second, he did not have occasion to fight in Afghanistan. However, I was still annoyed by the remark. You see, this officer's position smacked of obvious disregard for the combat experience literally suffered by many officers in the regiment. This experience acquires special value primarily by the fact that it takes into account the demand for combat and physical training of soldiers during operations in a rapidly changing situation of one-on-one combat with a strong, well-trained and well-armed enemy in mountain conditions, day and night.

Being a student of the Military Academy imeni M.V. Frunze, I got to talking on this subject with Hero of the Soviet Union Capt, now Lt Col, A. Chernozhukov. In Afghanistan he commanded first a platoon and then a company. He personally broke in the arriving replacements. Here is an interesting detail: Two to three weeks after intensive training in the mountains, the field clothing of the new guys needed to be mended and sometimes replaced. But it has nothing to do with their uniforms. I would like to call attention to the intensity and comprehensiveness of the training, prompted by the experience of combat employment of the subunits.

My classmate at the academy, A. Chernozhukov, is a modest person. He will not utter a word about his personal courage or commander's skill. But I still have a newspaper clipping about a specific combat situation in which he once ended up with his subordinates:

"A mine exploded under the wheels of the lead armored personnel carrier. Immediately, shots rang out from the side of the pass, and the echo of machinegun rounds began to rumble.

"In order to pin down the actions of the Dushmans, it was necessary to go up the incline above them. Chernozhukov's platoon rushed along the sharp rise to the mountain. Not everyone was capable of taking this steep slope even in a calm situation. And here there were pointblank shots. It was fractions of a second until the next spurt. About 1 meter from the abyss—from rock to rock. Ahead. Upward. More quickly.

"The Dushmans immediately understood the maneuver and shifted fire from the road to the group of daredevils climbing along the slope.

"A. Chernozhukov was lying behind a quite small rock. He was waiting for the fire to die down for just a second. The bandits had taken note of him, going first.. The bullets whistled by and hit the rocks right next to him. Chernozhukov carefully turned his head. His soldiers were hiding several steps away... He gave the signal: move ahead—now. It was no more than five paces to the next boulder.

"Five paces. Chernozhukov carefully examined this stretch from behind the rock. The one thing he must not do is stumble. A dash, and he and the entire group in one swift burst cover these several meters, which were more difficult and dangerous than the long trek. In a helpless fury, the Dushmans opened furious fire, but already on a vacated sector. Then the shots died down. The bandits withdrew in haste. The way was open."

It is not by chance that I recalled this combat episode, typical for Afghanistan. Judge for yourself: Can anything be deleted from it—elements of tactics, military skill, and, the main thing, physical endurance? In addition, we must not forget that this was the real enemy there.

The lessons of Afghanistan. Do we always remember and take into account the specific combat experience in our training and service, which we call military routine? Why do some commanders and chiefs, like rust on a weapon, sometimes strive for oversimplification so as, heaven forbid, not to disgrace themselves before commissions visiting the troops.

Afghan vet friends told me how the commander of a reconnaissance company of one of the regiments of our military district, Sr Lt Nurbek Kalekov, ended up in a complex situation. This officer was awarded two Red Star orders and two "For Bravery" medals for bravery and military skill demonstrated in fulfillment of international duty. Kalekov is a man who loves his combat specialty and completely restructured the subunit's combat and physical training according to "Afghan" standards. As soon as word of the officer's innovations reached higher headquarters, visits to the company by inspectors became more frequent. Their findings came down to one thing: The training process in the subunit is being grossly disrupted. For example, the obstacle course has been made more complicated and is filled with new elements. It is impossible to take tests and give marks according to established standards. Naturally, they began to persuade Kalekov at various gatherings and meetings.

A familiar picture from the stagnant times, is it not? But, you see, it was Kalekov's company, having been given the most critical task at exercises, that made a full-strength march over difficult terrain, came out into the enemy's rear, and made a surprise and crushing attack.

This is not the first time I have heard about Afghan vet officers, filled with initiative and devoted to their job, especially from among platoon and company commanders, being advised by superiors, at first in a fatherly way, "not to stick out." And if attempts to turn this same physical training toward the experience prompted by combat continue, expect punishment.

Is such an approach justified, particularly now, when the task is to comprehensively increase the qualitative parameters of military service? Fulfillment of this task is seen primarily in increasing the level of physical preparedness of soldiers.

I foresee objections: The draftee today is yesterday's student, often spoiled by excessive attention, and does not long to be a big strapping man. I will say frankly that this problem is indeed not a painless one. But for the time being, discussions of this problem at all levels are not making progress. So, there is only one thing left—take what they give you. After all, they are not born soldiers...

I write these lines and see myself still as a raw officer. After taking over a battalion, I was soon convinced that the main emphasis must be placed on physical training of the young soldiers. The mountainous conditions and mainly night actions of the subunit forced us to abandon the traditional equipping of the athletics camp with horizontal bars and parallel beams. There simply was neither time nor opportunity to practice "approach-withdrawal" and learn to weigh down the toe of the boots when performing exercises recommended by the regulations. Priority was given to exercises on the obstacle course with elements of risk, hand-to-hand combat, and accelerated marches over rugged terrain. The intensity of the exercises was pushed to the limit. Many of the young men did not have enough strength, and that is when homemade trainers appeared in the companies.

They say that more attention must be given to incentives. We had them in Afghanistan, too. There was no place for the weak in the formation among those who went on reconnaissance and were sent on raids and to carry out special missions. Harsh? But it was fair. We could not pay for "ladies'" education with blood.

I remember how one day, halfway to the mountain peak, Gds Pmts Vladimir Frolov and Fedor Kanyagin "went on strike." "We can't go any farther, we're out of breath!" They silently took their weapons and gear. By the eyes of their fellow soldiers they understood: They would not give up, if they could not make it themselves, they would carry them to the top, and they made it!

In just a few months the kids became soldiers. They moved along the steep mountain slopes like regular mountain climbers. In hand-to-hand combat, they had no equals in the battalion. In short, they turned out to be true

guardsmen. This is another lesson from Afghanistan: There can be no relaxation of discipline in physical improvement of soldiers.

The influx of the young generation into a military subunit is like an influx of blood into an organism. Initially, the injection itself weakens it, but later the healthy forces take over. In other words, as I already said, there must always be a reliable comrade nearby who, if necessary, will take the assault rifle and pack from weakened hands on the way to the peak and cheer them up with a glance.

I must honestly confess, I have been very lucky. In the regiment which I command, many of the officers and warrant officers went through the harsh school of Afghanistan. They, as they say, are quick to grasp my suggestions for improving the training material base and organize comprehensive training sessions. In turn, the regimental deputy commanders, subunit commander Maj V. Arefyev, and regimental air defense chief Lt Col V. Pilipenko are very considerate of the initiative of subordinates aimed at improving the effectiveness of the training process.

Much labor and inventiveness was required of us to build in the mountain training center several populated areas with real houses, huts, various fences, and green plantings. Thus, it was possible for us after a short forced march of many kilometers to fight in a kishlak [village] and in a city, during the course of which increased attention was given to techniques of one-on-one combat and hand-to-hand combat; all exercises and training sessions include actions containing elements of danger and risk, aimed at developing in personnel courage, decisiveness, and composure in the most difficult situations, today called extreme. Exercises in the mountains to seal off and destroy "enemy" fire positions at various elevations, parachute jumps from cliffs, and dropping personnel from helicopters in unfamiliar terrain with subsequent execution of a combat training mission serve these same goals.

An officer's personal example is important here as never before. It has become a rule: One of the officers from regimental headquarters is always sent with a subunit making a short forced march. Lt Col V. Grishin, chief of the regiment's political department, gets in formation without excess words. And he is always one of the first to arrive at the finish line. Lt Col L. Lidzhiyev, regimental deputy commander and chairman of the sports committee, acts in the same manner. The battalion commanders and subunit commanders try to keep up with the regimental deputy commanders and imitate them.

I could continue my thoughts about the experience of the best colleagues who demonstrate initiative and creativity in physical improvement of soldiers and about the innovations in the material technical base, to which the regiment is devoting much attention. Not everything is going smoothly and in a model manner with us. I think that the questions which I raised in the letter to KRASNAYA ZVEZDA also disturb other commanders and political workers. I would like to find out how the Afghan experience is "working" in other units and subunits, and what kind of difficulties they are having in implementing it.

**From the Editor.** In his letter to the editor, it seems to us that Lt Col A. Soluyanov raises important questions of increasing the quality and intensity of combat training and

organizing the process of special physical training in the troops. We would like to find out what our readers think about this.

**Modernization, Politization of Warsaw Pact  
Recommended**

18120008 Moscow MOSCOW NEWS in English No 40,  
08-15 Oct 89 p 6

[Article by Sergei Karaganov, Deputy Director, Institute of Europe, USSR Academy of Sciences: "WTO—Where To and How"]

[Text] When talk starts up about the influence of changes in Europe on the military blocs, the Soviet reader and the majority of professional international experts immediately look at NATO. It is plagued by crises and frictions, and the leaders of the bloc discuss with alarm the consequences of the changes and the way they should react.

We aren't used to looking the same way at our own defence bloc. Sober assessments of the situation in the Warsaw Treaty Organization remain, as before, quite rare. They are mainly (in the USSR anyway) official and full of praise.

There are achievements, of course. The setting up of the WTO and its development did play its role—Europe lived in peace for decades, the policy of the West was transformed from "roll-back" and revenge to a much more flexible doctrine. The WTO was politicized—new organs were set up and consultations made deeper and broader. This process was especially rapid from the late 60s to the late 70s. Then it slowed down and was resumed again only after 1985. The organization gave support to the voice of each of its members in world politics. Through the WTO they got the possibility for collective influence on each other and on the most powerful partner—the USSR.

But now the alliance is being battered by new challenges. Disarmament has started. The feeling of external threat—one of the forces that traditionally kept military-political alliances together—is becoming weaker.

The social and political changes in Eastern Europe are proceeding at different rates. Ideological, economic, political and ecological differences between a number of countries are surfacing. The existing mechanisms are, as yet, poorly adjusted to deal with them.

We're playing for a serious error—the practical absence of good information and of a public discussion around the aims of the organization and the interests of the countries affiliated to it. The WTO doesn't have a popular base in public, scientific and political circles of the member-countries. In this sense, two generations "were lost" in the last 35 years. The public gets most information about the

WTO from the West. The West isn't interested in strengthening the name and the unity of the opposite bloc. It can hardly be blamed for that. The problem lies with us.

Let's put the question as follows—is it necessary to struggle energetically for the development, strengthening and preservation of an alliance today, in conditions where confrontation is rapidly diminishing, and we, ourselves, officially call for overcoming the split of Europe into military blocs?

I think it is. Firstly, the confrontation is as yet far from being overcome. Secondly, reforms objectively carry with them an element of instability, especially in the transition period (apparently it will be a long one), and make states relatively vulnerable. They are therefore interested in the preservation of the most stable external surroundings. Lastly, both the alliances—NATO and the WTO, born of confrontation, also have non-confrontation functions. The main thing is to provide for similar geopolitical interests. It looks like the East European countries, with less population, a lower level of development, and, as a result, less political influence than their Western neighbours, will still need for a long time (even, in the conditions of reduced confrontation) to count on the might and support of the USSR. This need may even increase, taking into account the accelerating integration processes in Western Europe.

How can the objective interests of the WTO countries be met in this situation? An active, and creative policy is needed and efforts to modernize the WTO are also urgent. The course has been outlined—the turning of the alliance from a military-political into a political-military and then—to a political organization.

To do this it is necessary to speed up the politization of the WTO on the basis of complete equality. I think that public discussion of the WTO's problems and its future is necessary. Not only diplomats, the military and scientists but broad political and public circles, too, must be drawn into discussion. The growing role of parliaments in the political life of socialist countries demands that MPs take part in this discussion. The question of setting up a parliamentary organ, attached to the WTO, must not be taken off the agenda.

It seems obvious to me that the WTO is in need of setting up permanent institutions for developing a dialogue and cooperating on a broad range of political, ecological, cultural and humanitarian problems. The scientific work of the WTO also needs radical expansion. We need new institutions not only for our own concerns, but also in order to start a dialogue with NATO and to bring both alliances into the European integration process.

The arguments in favour of a definite expansion of WTO activities must not create an impression that the author calls for perpetuating the blocs. Quite to the contrary. I'm speaking about transforming our alliance into a vehicle for overcoming this split and securing stability during the time of changes. Destroying it would only jeopardize reforms.

### Interview With Commander of Reorganized Turkestan Military District

18010886 Moscow KRASNAYA ZVEZDA in Russian  
12 Sep 89 First Edition p 2

[Unattributed interview with commander of the Turkestan Military District, Col Gen I. Fuzhenko, USSR people's deputy: "Officers Have Always Been Proud of Service"]

[Text]

[Correspondent] Ivan Vasilyevich [Fuzhenko], the readers of KRASNAYA ZVEZDA are aware that the Turkestan Military District has recently been reorganized and incorporated in it formations and units from the eliminated Central Asian Military District. At present, the Turk VO [Turkestan Military District] is located on the territory of all the republics of Central Asia and Kazakhstan. But this is precisely how it was in its organizing. Did this influence the reorganization and simplify it?

[Fuzhenko] To a certain degree, yes. Although the work required a great effort. Our district is located on the southern frontier of the motherland and stretches some 6,500 km. The Central Asian Military District was separated from the Turkestan when the situation on this frontier grew more intense. Now our relations with our neighbors and particularly China have been normalized. For this reason the merging of the districts entailed not only a reduction in headquarters personnel but also in the troops. Let me say for an example that in the northwest of the district at present there are virtually no problems with housing for officer families. In truth, there is a problem in many other garrisons. The reorganization has essentially been completed. Many officers who have served their stipulated times have been discharged into the reserve while others have been sent to new places of service. Over 100—and we are proud of this—have been enrolled in military academies. Only two-score men did not come up to snuff and these, understandably, will not be shown great concern.

[Correspondent] Would you say that the staff and headquarters have maintained the work experience from the territory of all five republics under the various geographic and climatic conditions?

[Fuzhenko] Unfortunately, this is not the case. One indication. Previously, we were not very concerned by preparing the garrisons for winter. Now we are not only concerned but also alarmed. In the area of Aktyubinsk, for example, there are frequently meter-deep snowdrifts and frosts to -30 degrees. How can we prepare completely for this? We do not want to make any mistakes. For instance, in the south of the district in January it can be +5 degrees and in the north -40. The personnel will train in the mountains, the desert, the steppe, under the scorching sun and freezing wind. And we are all hopeful that the necessary experience will be gained as the workers of the district staff and political directorate have such experience as more than one-half of them served in Afghanistan.

[Correspondent] Could it be said that the personnel problems caused by the reorganization have been settled painlessly?

[Fuzhenko] We were hoping for this. For some the move was a source of joy while for others it greatly complicated life and exacerbated family relations while for a third group there was deeply wounded pride and a feeling of injustice. Incidentally, this is the case not only in a reorganization and cut-back in an army.

Recently we have been talking more sharply about the appearance of social injustice which has not bypassed the officer corps. Injustice at times arises before our very eyes. The graduate of a military school arrived in a regiment and he was immediately presented with a key to an apartment. But a fellow serviceman was held up for 24 hours enroute and there were no more apartments. It turns out that the lieutenant must turn over a third of his meager salary for a place to stay. It is sort of an inequality among equals. Incidentally, we have made every effort so that the school graduates who are the least well off in our officer family still obtained an apartment or a place in a dormitory.

I have repeatedly traveled to our southernmost garrisons. The sun is so hot that it feels like thousands of pinpricks begin scorching your skin from the outside. It is even difficult to stand next to a sun-baked tank. But the crew must still meet the standards. It is some 30 km to the nearest hospital which could treat a wife or child. School-age children must be sent either to the grandparents or to a boarding school. You begin wondering where service is easier—here or, for instance, in Kamchatka, although there service is no honeymoon. But in Kamchatka an officer receives northern benefits. But here there are none. And who has the heart to say that that is the way things are.

Just take a look at an officer's workday. In some units, as we have learned, a young officer is able to spend just 8 or 10 full days with his family a year. The commanders have been strictly ordered to provide the legal days off to subordinates. It would not be the end of the world, order would not come to an end, but actually the reverse. And what about the daily service meetings after 1700 hours? Some superiors go completely out of their way to dress down the men around midnight. We are putting an end to this practice. But still, things happen....

[Correspondent] With all the difficulties, it has been pointed out that the officers have always been proud of serving in the Turkestan Military District. They consider this period important in their service, providing much for professional training and tempering.

[Fuzhenko] I consider this pride natural. We actually do have all conditions for combat training and the development of the commander.

[Correspondent] In the district—on both the right and left flanks—they have set up good training centers and employ modern training equipment....

[Fuzhenko] Yes, a great deal of effort has been put into creating the training facilities and they generally make it

possible to work through all the program questions. But the word "modern" I would use cautiously, or would not employ it altogether. The trainers used now by the tank troops and motorized rifle troops are greatly inferior in terms of their capabilities to aviation trainers. There is more conditionality and the supply of training material is worse. It may happen that a tank driver may be sitting behind the controls of a trainer in the surroundings of Kushka, while on the screen there is a winding road covered with snow and ice. There simply is no other strip.

Many laudatory words have been voiced about our rather expensive firing ranges for the tanks and infantry fighting vehicles. But with all our procedural inventiveness it is precisely here that we accustom the men to routine and the standard, and to what, as the experience of Afghanistan persuaded us, does not actually exist in combat.

But, let me repeat, productive exercises are possible at present and there is scope for creativity. Only at times there is no one to teach. For example, several motor vehicle battalions have been dispatched to help in harvesting. And how many other tasks must be carried out, as they often say, with military forces!

[Correspondent] What problem do you consider most acute?

[Fuzhenko] The problem of military discipline and military education as a whole.

The level of discipline and efficiency in the army depends upon the discipline of labor in society. Here there is a direct linkage. With all my soul I support and with all my heart and mind I accept the well-known ideas of the party concerning the state of military discipline and the rigid conclusions about our failings and omissions. But, I feel that it is long since time to pay as much close attention to the level of discipline on the job, to social order and educating the coming generation in a spirit of responsibility to the nation and the people. Recently a study was made and we learned with regret that the number of inductees having a criminal record has been growing year by year, particularly among the students of the vocational and technical education system as we, in my view, take them away from parental influence too early.

Nor is everything going smoothly in educational work with the officers. Recently a graduate from one of the Leningrad military schools who had been assigned to serve in the district began by requesting a discharge into the reserves. Certain of our glorious, and I do not reject this word, traditions are dying out, there is less interest in military rituals and the notions of officer dignity and honor are changing and not for the better. With shame and even pain, you become convinced that certain mass information organs have ceased to be your helpers and allies in the question of education. Certain articles have not an uplifting, mobilizing impact but rather a destructive one. And at times a strong one. This is absolutely unjustified.

[Correspondent] You have been able to visit all corners of the district and speak with many people. What overall impression did you carry off with you?

[Fuzhenko] Even in the still most unequipped garrison I met many people—officers, their wives, children and soldiers—who one merely wishes to thank for a job well done. I always return inspired.

#### **Biographic Information on Col Gen Fuzhenko**

Col Gen Ivan Vasilyevich Fuzhenko was born in 1937 in the village of Subbotitsy, Znamenskiy Rayon, Kirovograd Oblast. His parents were kolkhoz members. His father was a disabled veteran of the Patriotic War First Group and the holder of two Orders of Glory.

After completing the Odessa Infantry School in 1957, I. Fuzhenko served in the Group of Soviet Forces in Germany, commanding a platoon and a company. He assumed command of a company also in the Transcaucasus Military District. Then he was the deputy battalion commander for political affairs and then battalion commander.

In 1970, he completed the Military Academy imeni M.V. Frunze and was in command of a regiment and a division in the Belorussian Military District. After studies in the Military Academy of the General Staff of the USSR Armed Forces, he became the deputy chief of staff of the Baltic Military District and the first deputy chief of staff of the Leningrad Military District. From 1982 through 1984, he carried out his international duty in Afghanistan. After commanding an army, I. Fuzhenko assumed the post of first deputy commander-in-chief of the Group of Soviet Forces in Germany and later became the first deputy commander of the Turkestan Military District. Since January of this year, he has been in command of the district troops.

#### **50,000 Warrant Officer 'Positions' To Be Retired**

90UM0006A Moscow KRASNAYA ZVEZDA in Russian  
15 Sep 89 First Edition p 1

[Interview with Maj Gen N. Yermolyev, chief, Main Personnel Directorate, USSR Ministry of Defense; by KRASNAYA ZVEZDA correspondent Lt Col I. Yesyutin: "What Will Become of Warrant Officers?"; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] Readers' questions are answered by Major General N. Yermolyev, who is chief of the Main Personnel Directorate of the USSR Ministry of Defense.

[KRASNAYA ZVEZDA] The subject of our discussion, Nikolay Nikolayevich, has been determined by mail from readers. Many readers in their letters note that we have published specific data on troop reductions and on the scope of reduction in the officer corps, and they wonder whether this will affect warrant officers of the Army and Navy.

[Yermolyev] Of course this will affect them. We are speaking of a reduction of 50,000 positions which have been held by Army and Navy warrant officers. However, this does not mean that 50,000 Army and Navy warrant officers will be discharged into the reserve. We would not

want to lose people who have proved themselves and fervently desire to serve. Only a portion of this category of servicemen will be discharged as a result of the reduction. The remainder will be reassigned to make up for existing shortages of Army and Navy warrant officers. In this regard, we have in the last six months been able to effect a significant increase in filling positions in the Far East, Transcaucasus, and Turkestan military districts. We are attempting to exercise care in our handling of this category of personnel, since they are generally true professionals and offer experience.

[KRASNAYA ZVEZDA] Do you believe that the institution of Army and Navy warrant officers effected more than 17.5 years ago has justified itself?

[Yermolyev] Undoubtedly. Let me cite general data. Approximately three-fourths of all Army and Navy warrant officers are specialists possessing higher proficiency classifications. More than 10,000 subunits commanded by them hold an excellent rating. About 50,000 Army and Navy warrant officers have been awarded state citations for courage, heroism, and service attainments. More than 30,000 warrant officers have seen combat activity. More than 96 percent of this category of servicemen possess a secondary or specialized secondary education, with 3.1 percent offering a higher education.

[KRASNAYA ZVEZDA] But remarks are made now and then to the effect that by and large they have "set themselves up" in support and rear service positions.

[Yermolyev] I do not know what gives rise to that idea. Sixty-five percent of Army and Navy warrant officers serve in command and technical assignments, work with personnel, and assume direct responsibility for the results of combat and political training in definite subunits. Twenty percent hold administrative and staff positions. Only 15 percent carry out support and rear service duties. I tell you that even this proportion will change as a result of the reductions being carried out in the Armed Forces. Our primary effort at present is placing Army and Navy warrant officers in command and technical positions. To perform administrative, staff, medical, and support work, we intend to hire to a greater extent blue-collar and white-collar workers for the Soviet Army and Navy and recruit service women.

[KRASNAYA ZVEZDA] Some Army and Navy warrant officers are women. It would be of interest to know how many there are.

[Yermolyev] More than 20,000. And they, you know, are highly qualified and exhibit a sense of responsibility toward their work. There are positions in which women are simply indispensable, such as medics and communications. We intend to continue to recruit them into the service.

[KRASNAYA ZVEZDA] It would appear that on the one hand we are cutting down, while . . .

[Yermolyev] . . . on the other hand we are taking on people. Is that what you wish to say? There is no contradiction

here. The Army and Navy still need warrant officers. And in the near future the requirement for them will not decrease, in my opinion. At the present time, these personnel undergo 5.5 and 10.5 months of training in the Armed Forces. There are also two-year schools for technicians. Nonetheless, they are still in short supply in subunits. We are concerned about the attrition rate of Army and Navy warrant officers. It is especially high among youth.

[KRASNAYA ZVEZDA] What are the causes?

[Yermolyev] There are quite a few. We cannot ignore the general mood existing in society that is injurious to the prestige of military service. However, there are also causes due to shortcomings on our part. To begin with, there is the failure to enlist qualified candidates for service as Army and Navy warrant officers. We apparently have not yet discovered effective mechanisms for selecting people that are suitable for military service—ones that are interested in and devoted to the military profession. A large part of the blame here falls on troop and fleet commanders, political workers, and military commissariat officers, who bear the responsibility of guiding warrant officers to study in schools to prepare them for service in the Army and Navy. In some cases a man is sent away to a school located many kilometers away, even though it is known beforehand that he will never become a military professional. This is done merely to fill the order.

There is also the problem of how effective schools are in teaching. It is necessary to organize the teaching process such that people receive the knowledge and skills they actually require. Schools should become a model for observance of regulations, respect for others, and high moral behavior. The teaching approach in these schools should stress cooperation and interest on the part of students in acquiring knowledge and experience.

Also rendering a negative influence is inadequacy in working directly with Army and Navy warrant officers in military units and aboard ships to which they are assigned. It sometime happens that a young man—the average age of Army and Navy warrant officers is 32—is left to the mercy of fate. No professional development system has been devised to develop Army and Navy warrant officers in many military units and aboard ship. Some commanders, headquarters, political and personnel organs consider an incoming young specialist or former soldier or seaman to be fully prepared to function as a commander or specialist, not bothering to provide him with education and guidance. He does not receive due attention in his work with people. As far as living quarters are concerned, he is not entitled to permanent quarters for a period of five years after graduation from school. While it is true that the unit is obligated to provide a graduate with service-furnished quarters in a dormitory or other facility, this is not always the case. People often knock about private apartments. The disorders they encounter in everyday affairs produce disappointment in the service. All this leads to their being discharged into the reserve as soon as they complete their term of service.

Analysis indicates that attrition is especially high among personnel inducted by military commissariats as Army and Navy warrant officers. They include a large number of persons of low moral and work-related calibre.

[KRASNAYA ZVEZDA] Is there any truth to the rumor mentioned in letters we receive that no more persons subject to the draft will be inducted as Army and Navy warrant officers, as a result of the troop and fleet reductions?

[Yermolyev] Yes. The USSR minister of defense made the decision to adopt this temporary measure. All those who wish to devote themselves to the service as Army or Navy warrant officers must undergo training in our schools, regardless of any education they may have already acquired.

[KRASNAYA ZVEZDA] Does this mean that women who wish to become warrant officers must also undergo training in the schools?

[Yermolyev] No. The regulation governing induction of women into active service as Army and Navy warrant officers remains unchanged.

#### **Rationale for Changes in Draft Disciplinary Regulations**

18011027 Moscow KRASNAYA ZVEZDA in Russian  
28 Sep 89 p 2

[Article by Col V. Bakharev, group chief, regulations department, Main Ground Forces Combat Training Directorate: "To Soften or Stiffen?"]

[Text] Continuing to acquaint our readers with the course of discussion of the new draft regulations (this time the Disciplinary Regulation), we give the floor to Col V. Bakharev, group chief, regulations department, Main Ground Forces Combat Training Directorate.

If one were to attempt to transmit in the most general form the spirit and content of the numerous proposals, remarks and additions coming into the commission on the draft Disciplinary Regulation, obviously it would be the thought that perestroika in the army and navy requires new approaches to the affirmation of conscious military discipline. These approaches, as for example notes Maj M. Tsura, must be rid of the slogans and appeals with which the existing Regulation is rife, and must create the real prerequisites for affirming in the troop collectives intolerance toward carelessness and negligence, and a radical correcting of the state of affairs in those units and subunits where, in the accurate comment of Sr Lt A. Mikakov, "military discipline has shifted from the category of "it is" to that of "it will be."

I believe that the thought itself about the need for such approaches is indisputable. But, and here I would like to make what is in my view an important reservation, in some letters it is put in a highly unique "frame," which, in my opinion, simply disorients.

Characteristic in this sense is the letter of Col A. Navarov, in which Aleksandr Vladimirovich asserts that the existing regulations "played a reactionary role in the breakdown of discipline in the army," and at the same time accuses the persons who prepared the draft regulations of incompetence.

I consider the polemic on the last point simply incorrect, if only because the composition of the commission for preparation of the draft regulations was published in a USSR Minister of Defense order accessible to all, and consists of people whose experience and knowledge of the problems of army life are undoubted. As for the "reactionary role," life has shown that all of our army misfortunes (including on questions of discipline) have arisen more often not because the regulation is "bad," but because its requirements were not always fulfilled, or were poorly buttressed by appropriate work of commanders, political workers, etc. In precisely the same way (and this, in my opinion, is fundamental) the new Disciplinary Regulation will also not play a significant role in strengthening military discipline, no matter how "good" it may be, if it is not buttressed by corresponding work in the troop units. If we really wish to change things for the better, this must be understood very clearly.

And now for the subject of the discussion. Comprehensive analysis of the proposals on the draft Disciplinary Regulation shows that some of the participants in the discussion (Lt Col Panyukov, captains Bekhtiyarov and Antonov, and others) favor stiffening disciplinary measures, especially concerning persons who mock or humiliate their coworkers, as well as those who conceal such instances or do not take steps to halt them. At the same time, it is proposed that new types of disciplinary punishments be introduced, such as, for example, strict arrest up to 10 days, and criminal arrest up to two or three months, for compulsory service military personnel, house arrest for officers, sending military personnel to a disciplinary battalion for up to three months (by decision of the regiment commander), extension of arrest to senior officers, "adding" to the term of service of soldiers and sergeants those days spent in the guard room, etc.

I note that some of these and similar proposals were already discussed during development of the draft regulations, but did not receive the support of the commission. It expressed its belief that a regulation, like a law, must not and cannot take vengeance, since punishment is not a goal in and of itself, but a means of restoring social justice and education, which is especially important under army conditions.

Can life inject its adjustments here? Needless to say, not in the idea itself. And on this plane the very widespread opinion among some commanders (chiefs) about the possibility of strengthening military discipline not by strengthening organizational and educational work, but by applying harsh punitive measures, seems erroneous, and has been refuted by practice. At the same time, one cannot fail to see the acuteness of the crime situation in the country, or close one's eyes to the fact that some soldiers

and sailors today come into service (most unfortunately) as formed drug and toxin addicts, alcoholics, and people with antisocial inclinations. The commission is carefully weighing all these circumstances. And in developing approaches to such difficult (you will agree) problems, it is simply good sense to combine the search for new ways with the use of existing experience.

What do I have in mind specifically? Well, say, in some letters it is proposed that sergeants be given authority to arrest subordinates (Warrant Officer A. Baday), or that company first sergeants be given authority equal to that of the company commander (Captain I. Yemelyanov). Understandably, people base their suggestions on some personal observations. But, nevertheless, a company commander possesses more experience in the education and training of subordinates than does a first sergeant or sergeant. And what does it mean to grant to a sergeant, who is still far from formed as an individual and commander, the authority to arrest his own contemporaries who are subordinates? From here it is not far to turn the company and regiment into a general regime colony.

Besides the advocates of harsh measures, there also exists another group of participants in the discussion which, to the contrary, call for softening the disciplinary norms. Thus, Comrade P. Shirokikh proposes (and others agree with him) that there be no arrests with holding in the guard room of officers, or (comrades Novoseltsev, Fritsyuk, Gubin) that the maximum term of arrest overall be reduced to five days. Warrant Officer V. Taskayev unambiguously considers imposition of work details out of turn to be a punishment that is an "anachronism to the era of stagnation," and demands its elimination.

These and a number of other proposals (that is what discussion is) are taken from among those discussed. But here, with respect to the latter, it is difficult for me personally to agree with Vasily Dmitriyevich. In my view, the elimination of such punishment from the 1975 regulation deprived sergeants of effective disciplinary authority. Many letter writers share this opinion, and propose rather harsh conditions for implementation of work details out of turn: only at night, and with granting no more than four hours for sleep. It seems difficult to formulate the last variant. After all, during "working off" the detail at night (let us say), control over the servicemen will no doubt be weakened, which increases the likelihood of non-regulation relations.

Proposals concerning incentives applied to various categories of military personnel are very numerous and diverse. One of the most widespread (judging by recent KRASNAYA ZVEZDA publications, as well as the letters of comrades Ostanin, Ibragimov, Grigoryev, and others) is about the granting of annual leave to soldiers and sergeants, under condition that leave granted to undisciplined servicemen be reduced. The wish has also been expressed

(V. Verestov, M. Nazmetdinov) for establishment of an award for compulsory service personnel in the amount of two or three months' pay.

Proposals on the procedure for fulfilling orders and applying incentives and imposing and carrying out disciplinary punishments merit particular attention in cases where one of the central concerns is the question of the carrying out of, if it can be so expressed, "unjust" criminal orders or, in other words, the principle of unconditional obedience. Since on 9 September KRASNAYA ZVEZDA published a collection of letters in which the readers criticized Article 7 of the draft Disciplinary Regulation, proposing that both the commander (chief) who issues a criminal order, and those who carry it out, be held responsible, there is no need to repeat them. I note, however, that there also exists another point of view, about the impermissibility of "doubt" in the nature of military orders, expressed, for example, by Col V. Astashin (KRASNAYA ZVEZDA, 3 May 89). Pluralism of opinions is the foundation in the preparation of such important documents as military regulations.

The proposals by Col Justice V. Bobrynev and comrades Glushkov, Samsonov and Shuzhurykhin (and many others) for reexamination of the norm on cancellation of disciplinary responsibility for reasons of time elapsed, regardless of the desire of the commander, are important. That is, if, for example, for a year from the moment that punishment has been imposed the serviceman has not been disciplined, the former punishment is considered cancelled. Judging again by mail received, the thoughts of comrades G. Popov and S. Ivanov about not holding the commander (chief) responsible for crimes and misdeeds of subordinates, if these violations are not the direct consequence of his activity, have much support.

I would especially like to discuss one other point mentioned both by representatives from the troop units, and by specialists, in particular employees of the Main Military Prosecutor's Office. The draft military regulations, in their opinion, establish responsibilities, but do not define specifically how violations of these responsibilities may be manifested, and what punishments may be imposed upon a guilty party for violations committed. In other words, we are talking about the appropriateness of the deed and the punishment, where the slightest injustice is perceived especially keenly, and at times provokes repeated violations and even crimes. In connection with this, it is proposed that a listing of disciplinary infractions, and the punishments appropriate to them, be determined.

Naturally, in such brief remarks it is very difficult to discuss all the additions and proposals that have been received. Therefore, in conclusion I will enumerate just some of the questions that already today are being worked on actively in the draft regulation. These include the provision on the procedure for fulfilling an order; the mechanism for implementation of disciplinary punishment of "out of turn duty detail;" reduction (deprivation) of awarded class qualification" (here, by the way, there are many "pro's" and "con's"); and "warning about incomplete compliance with duty requirements."

**Col Gen Grinkevich Interviewed on Tank Troops Day**

*18011028 Vilnyus SOVETSKAYA LITVA in Russian  
10 Sep 89 pp 1,3*

[Interview of Col Gen D. A. Grinkevich, chief of the General Staff and first deputy commander-in-chief of the Ground Forces: "Armor and People"]

[Text] Col Gen D. A. Grinkevich, chief of the General Staff and first deputy commander-in-chief of the Ground Forces, answers the questions of a TASS correspondent.

[Correspondent] Dmitriy Aleksandrovich, you are one of our most long time authors, and over many years we have already developed a certain system of discussions, in which we have attempted to encompass a circle of questions from the moment the tank troops began, up to their present day. If you do not object, let us reject stereotype and delve immediately into what is today most attracting the attention of the Soviet people. These, I believe, are most of all the problems associated with the unilateral reduction of troops and weapons, especially tanks, by our country.

[Grinkevich] I have no objection to posing the question in that way, although I also see no sufficient reason on Tanker Day for not discussing the history of the origin and development of the tank troops, all the more so in that it is in all respects remarkable. In it, like in a mirror, was reflected the entire biography of the Soviet Armed Forces.

The Red Army was strengthened, and the tank troops were also improved. The Great Patriotic War is a special page in their history. On the fields of its engagements tankers covered themselves with everlasting glory. The workers in the rear area armed them with armored equipment that was remarkable for its day. An entire family of tanks and self-propelled artillery was created. Our Soviet T-34 tank has been recognized as the best tank of World War II.

In the postwar period, based on the latest achievements of science, several new generations of armored equipment were created, and the combat skill and art of employing tank troops in the battle and operation were improved.

But this was not a matter of the Soviet Union, as Western ideologues asserted, having prepared aggression or intended to split Europe by tank strikes. It was that we were forced to respond to the nuclear threat, and a tank is most adapted for operations under conditions of nuclear weapons employment.

It must be recognized that the process of improving the tank troops led us to a substantial increase in our combat vehicle fleet. Today, taking into account the transformation of political thinking, a process of quantitative reduction of the tank troops is taking place.

[Correspondent] Just the same, Dmitriy Aleksandrovich, let us be frank. It is clear even to people who are far from military affairs that 10,000 tanks is a very large number to eliminate. This is the reason for the concern of our compatriots: Won't such a substantial reduction of the

tank fleet, in combination with the elimination of aviation and artillery weapons, weaken the might of our Armed forces? Is this not all the more so in that we already had in the past the unfortunate experience of not entirely justified reductions in troops and weapons?

[Grinkevich] I can assure you that we did not fail to learn from the errors and mistakes of past years, and we will under no circumstance repeat them. As for the might of the tank troops, it remains at a level sufficient to accomplish all the missions that entail from our new defensive military doctrine. This is in the first place.

In the second place, and this is most important, the concept of the policy of perestroika in defense organizational development is expressed in concentrated form in Soviet military doctrine. It is subordinate to the main task—preventing war—and derives from the need for a substantial reduction in the level of military confrontation, a halt to the arms race, and consistent, real disarmament. This is the general line of our policy, and is not a temporary action or tactical course. It is fundamental in its essence. In the course of its realization a reexamination of our views on ensuring national and universal security will be carried out. We are transitioning, as has already been stated repeatedly, from "mirror" responses to the development and improvement of the weapons on the other side, to asymmetry, but adequate to parry the threats, and from quantitative approaches to defense organizational development, to primarily qualitative approaches. Thus, the elimination of 10,000 tanks is an entirely well-grounded and thoroughly weighed step by our leadership, which will not entail a weakening of the might of the Armed Forces.

Here it is also appropriate to emphasize that we are carrying out the present reduction (and not only of tanks) unilaterally, as an act of good will. However, the West is not hastening to follow our example. Nor are they there drawing the necessary conclusions from the fact that the composition and structure of our Armed Forces groupings, not in words but in fact, are taking on a thoroughly defensive thrust.

A large group of American congressmen and journalists who recently visited units of the Western Group of Forces could have assured themselves of this. Nevertheless, the Western mass media continue to reiterate about our aggressiveness, and do not hurry to reject their own essentially offensive doctrines and conceptions. And the real preparation of the armed forces of the NATO countries for such operations are not ceasing.

All of this undoubtedly alerts us, causes us to be attentive, and necessitates vigilance.

[Correspondent] The policy of glasnost in defense organizational development made it possible for some of our mass media to view our unilateral disarmament from an entirely unexpected angle. It smells of billions of rubles thrown to the winds, they assert. Are such fears real?

[Grinkevich] No. We are eliminating tanks as fighting entities. But only a few of the combat vehicles will go to

scrap metal *per se*. Some tanks will become tank trainers. The majority will be turned into increased safety fire-fighting vehicles and multipurpose high passibility prime movers. They are already working on the BAM, at Baykonur, and in various quarries. There are already examples of the former tanks being used in rural areas. In other words, we are attempting to use them with maximum effectiveness in the economy.

At the present time preparation is being completed in the tank repair enterprises, and some have already begun to output production for the economy. First of all, many T-54 and T-55 tanks are becoming prime movers. Firefighting vehicles, retooled from tanks, will be delivered for many union ministries.

These tasks are being most successfully accomplished at the enterprises led by Col G. Zadykhaylo in the Carpathian, and Lt Col N. Prokopchik, in the Leningrad military districts.

[Correspondent] How is the acute problem of discharge of officers in connection with the reduction in the Ground Forces being solved?

[Grinkevich] The discharge of officers from the tank, as well as the other branches of arms, is truly not an easy problem. It is associated with solving a number of serious social and domestic tasks—finding work for the officers themselves and their wives, and organizing moves of many of them to new places of services and residence. The problem of providing housing for officers' families is especially acute. In particular, to solve it the Ministry of Defense will build through its own efforts more than 100 houses in the European part of the country over two years.

We are solving with maximum care the whole set of questions associated with the discharge of officers, remembering the immutable truth that attention and concern about the people who are fulfilling the honorable duty of defender of the homeland has been and remains the main factor determining the state of morale of the army.

Therefore, first those officers who have served their established terms and received the right to a full pension will be discharged. It will also be necessary to deal with those who are not fulfilling their duty conscientiously, and not meeting the heightened modern requirements placed upon military service. Officers who have reached the maximum age, but do not have the right to pension support, will have an opportunity to continue service.

I would also like to say that, along with the Ministry of Defense, local organs of government, and managers of enterprises and departments, must share concern about the officers and warrant officers discharged from the cadres, and their families. For the extent of the processes of perestroika in the country can also be judged largely by how the former military people will be socially set up in "civilian life." It will also not be superfluous to recall the undisputed truth that those who are leaving the officer corps are competent people, with working experience, who can still bring considerable benefit in all spheres of the economy.

[Correspondent] In the light of our new defensive doctrine, will the tank troops retain their purpose as the main strike force?

[Grinkevich] I already mentioned that a process of organizational perestroika is taking place in the Armed Forces, in accordance with the defensive thrust of Soviet military doctrine. Along with the reduction in numerical strength, forces and resources that possess the capability to wage and support offensive operations—airborne units and assault crossing subunits—are being removed from the composition of our troop groupings. Undoubtedly, this process is also affecting the tank troops. The specific data have been announced officially, and there is no need to repeat them.

I think that these measures will help many people in the West rid themselves of the "tank syndrome" that has been foisted upon them by propaganda. I hope that talks about "tank battering rams," that Soviet troops are supposedly preparing, will also recede into the past, as well as of the notorious "Soviet military threat" in general.

I would like to use this opportunity to emphasize again that the defensive thrust of our military doctrine is based on the fact that the USSR will never, under any circumstances, attack anyone, will not be first to begin military actions, and will never use nuclear weapons first. Naturally, our tank troops will also never be a means of aggression.

The tank is the most stable and general purpose, including antitank, system for operations under the most complex conditions of modern combat. It has become a necessary part not only of tank, but also of motorized rifle units and large units. It has been organically entered into the combat formation of the troops, not only in the offense, but also in the defense, ensuring its stability, and increasing its firepower. Therefore, improvement of tanks, especially increasing the effectiveness of their operations in defensive combat, will undoubtedly continue.

[Correspondent] In the tank troops progress is truly striding in seven league boots. Those tanks that just 10 years ago we studied in the academy under heavy secrecy are now in the inventories of the military districts. This equipment is rather complex. And here I see a problem. Is it easy for young people, the majority of whom have no impression about modern combat equipment, to learn such a complex, computerized combat apparatus in a short period of time? Are they nevertheless managing to handle this difficult duty? And in general, what problems exist in the tank troops?

[Grinkevich] Service in the modern tank troops truly presents increased, I would say even high demands on all tank specialists, without exception. The role of the factor of time in combat, and requirements for tactical, technical and general educational training of the soldiers, and for their physical tempering, have increased many-fold. But, our tankers love their branch of arms, are proud of it, and in the overwhelming majority are successfully handling the solving of complex tasks.

As for problems, they undoubtedly exist, and there are difficult ones. Many of them affect not only the tankers. In a number of units questions of discipline, and, most importantly, of rooting out non-regulation relationships, have not been completely solved.

For the sake of fairness, I can say that they are much rarer among tankers. In some units the necessary attention is not being paid to the safekeeping and to a careful attitude toward complex and costly combat equipment. The difficult, and in large part painful process of eliminating old views and stereotypes in combat training and service is continuing. Tank units and large units have also not avoided it. It must be acknowledged frankly that *perestroika* is going more slowly than we would like. In short, problems exist. We are working on them persistently and stubbornly.

But not all of them can be solved only in the army itself, and only by military personnel alone. You see, I am an old soldier, and have served more than 40 years in the Armed Forces. And I must state sadly that the prestige of military service among young people recently has fallen significantly. In the period of extended *glasnost* and democracy, some of the mass media, in my opinion, were overly zealous in "discrowning" the heroic halo around our Armed Forces.

I am not against criticizing shortcomings in the army environment. It is even useful. We are for criticism, but for criticism that is objective, well-founded, benevolent, and undoubtedly competent. It would also be unfair to overlook the specifics of military labor, and to forget that the military profession is one of increased risk. In everything, including critical analysis of such a profession as defender of the Homeland, and everything that accompanies it, maximum respectfulness is required. And it, unfortunately, is not always sufficient.

[Correspondent] I would not like our pre-holiday conversation to conclude on a sad note. Therefore, tell us please about those tankers who have approached their professional holiday with the greatest successes.

[Grinkevich] Now is a feverish time in the Ground Forces. The concluding stage of the summer training period is underway. The intensity of the training process has reached its climax. On the tank training areas, ranges, and training fields tankers, under the leadership of their commanders, are learning to drive their combat vehicles masterfully, strike targets with the first rounds, day and night, and operate competently and ably under conditions as near as possible to those of combat.

If we speak about specific people, it is difficult to enumerate all who deserve to be named on this day among the best. There are many. But, just the same I will name some of them. They are tank regiment commanders Col Yu. Pakhomov, and lieutenant colonels M. Ashurov and V. Yemtsev. Our glorious detachment of soldier-tankers, along with all the soldiers in the Armed Forces, is vigilantly standing watch over the peaceful labor of the Soviet people.

#### **Average Individual Combat Load for Airborne Soldier**

18010007 Moscow KRSNAYA ZVEZDA in Russian  
13 Oct 89 First Edition p 2

[KRSNAYA ZVEZDA Correspondent: "Initiative of the Military Newspaper: Soviet of Afghanis".]

[Excerpt] Even here in the Soyuz, we considered that in Afghanistan an airborne reconnaissance soldier carried on his person more than 40 kilograms. His complete kit included: 900 rounds, 10 grenades, and 3 liters of water in canteens. This, as they say, is officially. Commonly, however, on a raid we also packed an additional two packs [*tsinka*] of cartridges. ...

### Commentary on Maneuverability, Performance of SU-27

90UM0029A Moscow VOYENNYE ZNANIYA in Russian No 8 Aug 89 (signed to press 6 Jul 89) p 16

[Article by Colonel (Reserve) V. Knyazkov: "The Su-27 Fighter-Interceptor"]

[Text] Most likely, the short word "intercept", like the word "shot" is well-known to many people. It has become firmly embedded in the lexicon of fighter pilots. To successfully intercept a hostile aircraft, which is dashing at a great speed toward protected installations, and destroy it in a fleeting engagement—such is the law in the life of aviators, who are defending the aerial borders of our homeland.

The intercept is entrusted to aces, who have state-of-the-art aircraft at their disposal. The Su-27 Fighter-Interceptor, was created at the P. O. Sukhoi Experimental Design Office (OKB) under the guidance of general designer M. Simonov.

Every model of weapon has an aggregate of tactical-technical specifications which also determine its combat characteristics. As a rule, one can always pick out the several principal and most important characteristics. They are the most absolute indicators of that model's capabilities and provide its distinctive, composite assessment. Experts have noted that there is not another aircraft in the world like the Su-27, in which the highest degree of maneuverability has been combined with aerodynamic efficiency and other characteristics.

Such praise is not conferred upon every aircraft. Especially since this aircraft is called upon to perform its combat mission under extremely rigorous conditions, when time is literally compressed into seconds. True, time passes slowly, while the fighter is in a state of scramble alert at the airfield. But time flies, when the command "scramble" is given—the aircraft reacts as if it were shot from a gun.

All episodes of the intercept rush past as if in a kaleidoscope: a short, powerful take-off run, a rapid climb to altitude, entry into the air defense zone, a search for the target, and the attack. It is at this point that the objective demand placed upon fighter-interceptors by the present military technological revolution is revealed—faster, higher, and farther. And every item—according to the maximum parameters. And it is from these positions that we will examine the combat employment, equipment, and basic performance characteristics of the Su-27.

First of all, we will formulate its combat employment. Firstly, this aircraft is an all-weather fighter interceptor. Secondly, the Su-27 is capable of functioning as an air superiority fighter. Thirdly, it can be used as an escort fighter.

What can be said about the aircraft's design? It is a single seat monoplane with mid mounted wings having a span of 14.7 meters. The wings' leading edge angle of sweep is 42 degrees. Maneuverable slats are mounted along the entire leading edge of the wings and the flaps and ailerons are

located on the trailing edge. On the whole, the wing together with its lift augmentation devices has a perfect aerodynamic shape, which allows it to create the highest possible lift and provides unprecedented maneuverability.

A little bit about the fuselage. It is all metal. The pressurized cockpit with the pilot life support systems, the ejection seat, and the equipment for the numerous control, communications, and navigation systems are located within. The antenna for the Doppler radar set (RLS) is located in a radio-transparent radome in the nose portion. The overall length of the aircraft is 21.9 meters and its height is 5.5 meters.

The tail section of the Su-27 has twin vertical stabilizers. The horizontal stabilizers with a span of 9.9 meters also serve as elevators. Rudders are mounted on both vertical stabilizers.

Many favorable comments have been made about the Su-27's power plant. It consists of two turbofan engines, each having approximately 12.5 tons of thrust. The "turbo" part is understood—it means that the basis of this engine, as it relates to the broad category of jet engines, is the gas turbine. The other part—"fan"—requires explanation. The fact is that all gas turbine air-breathing engines are identical in structure: an air intake, compressor, combustor, gas turbine, and exhaust nozzle. And the operation of the engine proceeds in the exact sequence, in which its structural components were enumerated: the incoming air flow "is swallowed" by the air intake, is compressed in the compressor, and enters the combustor, into which fuel is sprayed through nozzles; the combustion gases, which are mixed with air, strike the gas turbine blades and are directed into the exhaust nozzle. As a result, thrust, which pushes the aircraft forward, is generated.

A feature of the turbofan engine is that its two systems, in other words, its two loops—low-pressure and high-pressure—are efficiently combined. The low-pressure compressor in its outward appearance resembles a fan, but actually the amount of air that it takes in is a magnitude greater than the high-pressure compressor takes in. As a result, the loop with the fan creates the lion's share of the thrust.

In any case, we have managed to create a compact, very efficient aircraft engine, which possesses great power, and which not only provides the fighter-interceptor a fantastic rate of climb, but also other combat characteristics, which have received high marks. Suffice it to say that the aircraft develops a maximum horizontal speed at altitude, which is more than twice the speed of sound (2.35), and at sea level attains a maximum speed equal to Mach 1.1. And this is under the condition when the aircraft's maximum takeoff weight may reach 30,000 kilograms.

The fighter has a retractable, tricycle-style landing gear. It consists of one forward strut and two main struts.

Let us go into somewhat more detail about the aerobatic capabilities of the Su-27. It is not enough that the Su-27 is capable of intercepting a target in the stratosphere and performing any aerial stunt in elementary, advanced, and

expert-level advanced aerobatics. The pilot, if required, can even demonstrate the very difficult stunt, which experts call the figure eight, in this aircraft. With a little imagination, one can picture before his very eyes all the evolutions, which are being executed by the aircraft darting through the air. As soon as the Su-27 lifts off from the runway, it begins to execute a death defying loop, but it does not close the loop completely, and after reaching the uppermost point of the loop, it flies inverted along a longitudinal axis and executes a second loop above the first. Aviation experts contend that not a single other aircraft in the world, besides the Su-27, has successfully executed this figure eight within an altitudinal envelope of only 800 meters.

There is a multitude of other aerial stunts which determine aerobatic skill—rolls, zooms, half rolls, loops, turns etc. Of course, the turn is the most common of these maneuvers. Any pilot will say: "The simplest flight maneuver". I suppose, according to earthly measures this is turning the aircraft to the right and left on a horizontal plane. However, experts are not merely interested in a turn, but a complete 360 degree turn of the aircraft and more precisely the length of time it takes to complete it. Frankly speaking, this is a very specific and important index, especially for fighter-interceptors, when one is required to engage the enemy in aerial combat a second time. It is at that time that one must literally turn "on a dime", in order to forestall the enemy and destroy him in the second attack. The Su-27 executes a complete 360 degree turn in a matter of seconds. This is a splendid performance characteristic. It indicates not only the maneuverability of the aircraft, but also the quality of the power plant and the comfort factors which have been created for the pilot. You see, during the execution of a turn, the pilot sustains 9 g's.

A little concerning one more important index—the fighter-interceptor's operating range. The fighter's maximum range is up to 4,000 kilometers. Is this high or low? For the sake of comparison, we will point out that the Su-27 has a range without external fuel tanks which exceeds the similar capabilities of the best foreign models by 50 percent. Just one example of the aforementioned—In June of this year, the Su-27 flew nonstop to the Paris Air Show.

Now for a separate discussion of the fighter-interceptor's armaments. This aircraft was not created for display, but for aerial combat, therefore, the on board weapons package must ensure the destruction of targets in the rapidly developing conditions of aerial combat. For this purpose up to ten air-to-air missiles can be hung under the wings and fuselage. The aircraft also has a 30 mm rapid-fire automatic cannon.

A fire control system, which includes a radar (RLS) capable of detecting targets at long ranges, ensures accurately aimed fire.

Improved flight control and navigation equipment and reliable communications equipment has been installed on the aircraft. The Su-27 is equipped with RHAW gear. Its

equipment warns the pilot of a threat—such as occurs in those cases when the fighter is illuminated by another's radar (RLS).

On the whole, the Su-27 is the new word in fighter aviation and a reliable defender of our homeland's aerial borders.

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#### **Su-24, An-12 Collide Over Transcaucasus MD Airfield**

90UM0055A Moscow KRASNAYA ZVEZDA in Russian  
18 Oct 89 First Edition p 4

[Article by Colonel A. Manushkin: "Accident on Take-off"]

[Text] As has already been reported in the press, an Su-24 bomber crashed during night flight operations at one of the airfields of the Transcaucasus Military District. While taking off, it collided with the An-12 military transport aircraft which was parked and was being refuelled at the time. What were the circumstances? This is what we have been told at the Main Headquarters of the Air Force and at the aviation flight safety service of the USSR Ministry of Defense.

Military Pilot 1st Class Colonel Yu. Grigoryev was flying the Su-24, and Captain A. Gorovchakov was in the navigator's seat. While taxiing prior to takeoff, the members of the crew erroneously assumed the takeoff position not on the runway but on the main taxiway. This brought about the collision with the military transport aircraft. A fire broke out as a result of which both aircraft burned down. Colonel Yu. Grigoryev died. The navigator of the Su-24 Captain A. Gorovchakov managed to eject and is alive.

In the crash, members of the An-12 crew died: Commander Major V. Yakovlev, senior flight technician for air assault equipment Captain V. Serdyukov, gunner Warrant Officer S. Sergiyenko, and assistant to the chief of the Fuel and Lubricants Service of the unit Lieutenant S. Ganzha.

According to preliminary data, the bomber hit a car with a wing panel while accelerating to take off and went off the main way in the direction of the An-12 which was being refuelled. However, more precise answers to this and other questions will be provided by a special commission headed by Air Force Lieutenant General Ye. Rusanov which is now working at the site of the event.

When the material was prepared for publication it became known that the driver of the fuel tanker truck Private V. Molcharov had died of burns and wounds in the garrison hospital.

#### **Air Defense Conference on Interethnic Relations**

90UM0055B Moscow KRASNAYA ZVEZDA in Russian  
19 Oct 89 First Edition p 1

[Article by Lieutenant Colonel S. Ivanov: "Tasks Have Been Set"]

[Text] Current issues of improving interethnic relations and restructuring the internationalist indoctrination of personnel were considered at a regional conference of commanders, chiefs of political organs, and party and ideological aktiv which was held at unit "N" of the Air Defense Troops.

In his report, member of the Military Council Chief of the Political Administration of the Air Defense Troops Colonel General V.A. Silakov analyzed the socio-political situation which has arisen in a number of republics,

including the Baltic area, on account of military units, outlined the main avenues for the actions of political organs and the ideological aktiv in execution of the decisions of the September Plenum of the CPSU Central Committee, and set the tasks for improving the internationalist indoctrination of personnel.

Ranking functionaries of the Central Committees of the Communist Parties of Estonia, Latvia, and Lithuania spoke at the meeting.

### **Admiral Makarov on Goals, Problems Under Defensive Doctrine**

90UM0012A Moscow VOYENNYE ZNANIYA in Russian No 7, Jul 89 (signed to press 6 Jun 89) pp 2-3

[Article by Adm K.V. Makarov, Chief of the High Staff and First Deputy Commander-in-Chief of the Navy: "The Oceans Are Conquered by the Courageous"]

[Text] Fifty years ago, in July 1939, Navy Day was established by a decree of the All-Union Communist Party (Bolshevik) Central Committee and the USSR Council of People's Commissars as a review of the combat readiness, military skill and expertise of the sailors.

On the pages of our journal, the Chief of the High Staff and First Deputy Commander-in-Chief of the Navy, Adm K.V. Makarov, describes the current problems of our fleet.

On Navy Day each Soviet person with particular clarity realizes that the USSR is a great sea power and our valorous Navy vigilantly guards our sea frontiers stretching over 40,000 km. Our fleet has a glorious campaign record. Just during the years of the Great Patriotic War, over 350,000 sailors for courage and valor were awarded combat orders and medals and around 600 received the title of Hero of the Soviet Union.

In peacetime there is also a place for a fleet. A clear example of this is the operations of the Soviet Navy in the Persian Gulf. The ships entered there in the autumn of 1986 for carrying out a state task of defending our civilian navigation. The grounds for this was the firing on the diesel vessel "Petr Yemtsov" and the attempt to hold it by the ships of the Iranian Navy. After establishing our presence, regardless of the numerous feeble efforts, not one of our escorted vessels came under attack. They were all thwarted by the precise operations of the Soviet sailors. A particularly great responsibility befell the minesweeping forces, as in virtually all these years the mine situation on the Persian Gulf was very complex.

Let me give some figures. From the autumn of 1986, more than 200 vessels of different countries of the world sustained damage in the Persian Gulf. Located there were groups of ships from six NATO countries with a total number of over 50 flags and the largest in number was the grouping of the U.S. Navy (30 units). Our detachment all this time consisted of 3-5 fighting ships and 4-5 support vessels but it brilliantly carried out its task. For its successful fulfillment, many sailors, petty officers and officers received state decorations, commendations from the USSR minister of defense, and individual crew members by the USSR Navy minister.

In the West, fabrications have been spread about the increase in number of our ships in the various ocean regions, but they have no solid grounds beneath them. On the contrary, we have significantly reduced the number of long-range cruises. Such actions are a continuation of our state's policy aimed at reducing tension and normalizing the military-political situation. At the same time, we feel that visits and professional calls by ships and vessels in the

ports of foreign states contribute to the development of friendly ties with the peoples of different nations while the meetings of our sailors with the local populus make it possible to achieve greater mutual understanding, to better know the culture, traditions and way of life of the peoples and strengthen feelings of mutual respect and confidence.

The defensive nature of our military doctrine presently also determines naval development. The main thing is to improve the qualitative performance of the forces and combat facilities of the fleet with a definite stabilization and partial reduction in their quantitative composition. The composition of the fleets is being updated and their organization and establishment improved. New ships, vessels and aircraft are being commissioned to replace those which have served their established life and we are developing modern models of ship and aviation weaponry for different purposes as well as other combat and support means. Significant attention is being paid to developing the support system of the fleet forces and this includes the basing, repair and maintenance of ships and weapons and the resupplying of them with all types of supplies. Great amounts are being allocated to improve the life of the personnel. Thus, there are plans to provide full amenities for the fleet garrisons as well as expand the construction of housing and cultural-service facilities at the base points.

Let me emphasize that current Soviet military doctrine places higher demands on the combat readiness of the fleet forces and their ability to repel any aggression. Operational and combat training have been planned and are being carried out considering this. It is essential to train effectively the commanders, staffs and forces for operations in the initial period of a war, with a surprise attack, when the high combat stability of the fleet forces must be ensured. But does this mean giving the initiative to the other side and passively conducting combat operations at sea? In no way. Having repulsed the attack, the fleet forces should be ready to launch crushing retaliatory strikes and defeat the aggressor. For this reason in the course of training we are improving the forms, methods and tactical procedures of all types of defense as well as launching powerful retaliatory strikes.

It is possible to improve the quality of training for the naval forces only by eliminating oversimplification, having brought combat training closer to real defensive conditions and having introduced new forms and methods for working out combat exercises, in making extensive use in the training process of electronic computers and simulators capable of reproducing the situation and conditions close to real ones and ensuring visibility of training. Without this a real sailor cannot be trained as the sea is conquered only by the able and courageous.

The organization of cooperation is being worked out more effectively between the different naval forces and the other Armed Services as well as joint measures with the navies of the Warsaw Pact countries. Fewer measures have begun to be carried out but more attention is given to cooperation and command of the groupings in carrying out common tasks.

The reality of today is such that the military-political leadership of the United States and NATO are not willing to enter into any talks on reducing naval forces or restricting their activities. Regardless of this, the announced reduction in the armed forces applies fully to Navy but here the main tasks of the Navy have not changed substantially. With a certain adjustment in the priority of carrying them out, the main ones among them are: to constantly maintain the forces in a high degree of combat readiness to repel aggression from the ocean and sea directions. This obliges us to carefully monitor the actions of the probable enemy's navy and respond promptly to how, under the guise of conducting exercises, he is deploying and boosting its groupings. Why increase the combat readiness of one's forces and in the necessary instances deploy them for conducting one's exercises.

At present, certainly, the time has also come to discuss our "inner problems." Since in front of me is basically a DOSAAF audience, I would like to touch here on the questions of our cooperation. Recently this has improved with the USSR DOSAAF Central Committee. Order and organization have risen markedly in the training organization, supervision over the training of the specialists has been strengthened, specific aid has been provided to the instructors in improving the training process and military patriotic work, and the software support for the training and educational process is being built up intensely.

The fleets are systematically monitoring the training and development of the graduates of the DOSAAF naval schools on the ships and in the units. As a consequence there has been a one-third reduction in the number of young sailors not permitted independent execution of their duties at the established time. Recently we have made a strong contribution to developing and improving the training facilities of DOSAAF. Just in 1985-1988, 26 ships and launches and also more than 250 boats were transferred to it. We are taking an active part in summing up the work results of the DOSAAF training organizations and from the results of this each year we present a challenge Red Banner for the best training of specialists for the Navy. In 1988, such an award was presented to the Nikolayev Demonstration Naval School of the DOSAAF imeni Geroy Sovetskogo Soyuza A. Lyutyy.

However, the level of specialist training in the naval schools still does not fully meet the demands of the modern Navy. They must be trained additionally directly on the ships and in the units, since the knowledge and skills of just 40 percent of them meet the requirements of today. We have major claims against the quality of specialist training in the Kherson, Novosibirsk and other naval schools.

The plan for the furnishing of specialists is chronically not fulfilled and each year the fleets fail to receive an average of 15 percent of the navy school graduates. The technical admitting commissions of the fleets have pointed out that a portion of the graduates has openly stated a reticence to serve on the ships, some have "lost" or destroyed the certificates showing the completion of the schools, they deny that they have studied in the DOSAAF training

organizations or state that they rarely attended them and for this reason are not trained as specialists. Others evidence a moral and psychological reticence for service on a ship even later, when they arrive in the fleet, and, unfortunately, in an emergency situation. Only 8-10 percent of the DOSAAF students enters higher naval schools and navy technician schools. This is a very small figure. We feel that the military patriotic work in the DOSAAF naval schools can be considered effective only in the instance that a majority of their graduates voices a desire to serve an extended term in the fleet as officers or warrant officers ["michman"].

We must also add the insufficient practical focus of the training and educational process and the incomplete training facilities. As a result there has been poor training of the DOSAAF members in the specialty, in damage control exercises and insufficient knowledge of the principles of naval affairs. Specialist training has been negatively influenced by the extended time gap between graduation and induction. This "lead" sometimes exceeds 4 months, a period during which even a well-trained specialist loses a large portion of the obtained knowledge and skills.

Unfortunately, the number of persons unfit for service on ships due to reasons of health, who completed instruction 4 months and more prior to induction, and who went through an incomplete training course or is unsatisfactorily trained, comprises 25-29 percent in each induction. Thus, the ships and units receive only around 70 percent of the specialists who can be employed in their proper purpose. Consequently, virtually one-quarter of the DOSAAF naval schools, due to the poor quality manning and training, works with low efficiency. Generally, this is something for us to think about and work on together!

One other sore point is the problem of hazing. We are aware of how profoundly this disturbs both the draftees and their parents. This is one of the most intolerable phenomena which arose on the ships and in the units during the years of stagnation.

At present, we are working out and implementing a range of measures aimed at eradicating both hazing itself as well as the reasons for its development. The main thing here, we feel, is to form healthy navy collectives, to create in them a situation of intolerance against any negative phenomena and instill in the sailors a feeling of comradeship and mutual support. Along with the commanders and political workers, the Komsomol organizations and the navy community is evermore widely involved in combating the hazing. The improved conditions of service, everyday life and recreation for the personnel have also had a beneficial effect.

As a counter against hazing we see the introduction of the principle of the inevitability of punishment for committed infractions. At present, the persons guilty of infractions are not only held liable under criminal and disciplinary procedures but also we endeavor to influence them using the collective opinion of the men.

As a result of such effective work in the navy for a number of years a normal situation has been maintained in the subunits and the number of infractions has declined based on improper relationships.

What usually attracts a young man to the navy? Most often they say it is the romance of the sea and naval service. But not everyone understands these words in the same way. For some this is the smartness of the uniform, the handsome silhouettes of fighting ships and the beckoning names of foreign ports...

Certainly a young person should like this. But such a superficial sense of romance is too small an incentive to withstand the test of life and the hardships of naval service. A real romantic is the one who is not attracted by mere window dressing but rather is drawn to the main concerns of the motherland and through which its history is achieved. Among such concerns, undoubtedly, is the concern of the defense of the fatherland which over the centuries has been the main thing for the men of all generations.

We would like to wish you, young friends, that in preparing for naval service you strengthen yourselves morally and physically, study hard, be ready to overcome the great physical and psychological stresses during long cruises, and accustom yourselves to iron discipline without which the very existence of the fleet is inconceivable.

Good luck in the Navy!

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### Safety of Diesel Vs Nuclear Submarines

90UM0012B Moscow KRASNAYA ZVEZDA in Russian 29 Sep 89 First Edition p 4

[Article, published under the heading "We Reply to Reader Questions," by S. Yuryev: "Diesel and Nuclear"]

[Text] [Question in Letter] My son is serving on a diesel submarine. I have heard that conditions there are much worse than on nuclear subs. Is this the case? N. Gromakova from Moscow [End of Letter]

Of course, service conditions on diesel subs are worse than on nuclear ones. This is due to a whole series of their design features including such things as relatively small hull dimensions, the presence of powerful diesel engines and a large number of batteries. However, the diesel subs are equipped with the necessary minimum for supporting the life activities of the crew and its safety. They have rescue devices, ventilation and air regeneration systems in the compartments and much else.

For the crew during a cruise, special berths have been provided and there is a well-equipped galley.

While moored in the base, the submariners live on shore in well-equipped barracks which have everything required for balanced leisure.

### Factors Inhibiting Ship Captains' Decision-Making

90UM0052A Moscow KRASNAYA ZVEZDA in Russian 18 Oct 89 First Edition p 2

[Article by Captain 3rd Rank V. Gundarov of the Northern Fleet: "Commanders' Independence: Can the Center Really See Everything?"]

[Text] A surface ship sighted an inflatable lifeboat while carrying out combat training tasks on the high seas. The three men aboard the lifeboat were signalling distress. As far as the ship's captain was concerned, this was a straightforward situation, one that is covered in the Naval Regulations: He is obligated to render assistance to all ships or vessels suffering distress at sea, using all means at his disposal. It would appear that one need go no further—it remains merely to fulfill the requirement of the Regulations. However, in this case the ship's captain radioed the shore duty officer for permission to take action—permission that was granted, but only after a time lapse of several hours. Fortunately, the persons needing assistance were soon rescued by a civilian ship.

What caused the ship's captain to act against the law of the sea? In discussions on this subject I had with ship commanders of my acquaintance, I arrived at the following conclusion: The cause of matters of this sort lies squarely with the many officers whose habit is not make a move without requesting "permission from on high."

This situation must be changed. However, this is not a matter of decentralization of authority, which, in the military as nowhere else, must be concentrated in a few people, but one of expanding the authority of every commander and chief to act independently to the full extent of his jurisdiction.

The absurdity of some directives issued to ship commanders can be clearly seen in occurrences of the recent past. In one case, before departing on a cruise, the commander of a nuclear-powered submarine was instructed on how he was to operate the main propulsion unit to reduce consumption of reserve power. The struggle for economy foisted on him from above became an end in itself. Does rate of consumption of nuclear energy depend upon a commander to that extent? A ship plying the open ocean or performing combat duty uses as much reserve power as she needs to accomplish her assigned tasks. There is no evidence of inapplicability of this practice. What is the result? Some commanders, wishing to avoid the difficulties associated with constant monitoring of reserve power consumption, resort to entering false data.

"Let me tell you about an experience we had," said Captain 1st Rank V. Prudnikov on the subject of entering false data. "After repairs had been completed, we attempted to activate a reactor without success. The 'economy' that had been effected on the previous cruises was so profound that the reactor core was exhausted long before that was to occur on the basis of past performance."

Nuclear-powered submarine commanders are no longer required to try to economize whenever this is counterproductive. The idea that had originated in the inner recesses of offices located far from the sea simply died.

However, numerous limitations imposed on the activity of ship commanders continue to exist; restrictions that are completely unjustified. Such as the abovementioned matter of economy, for example, but in this case in the aspect of materials and monetary cost. Everyone is aware of the lack of flexibility inherent in ship repair plans. Existing norms specify definite amounts that can be spent on repairs, regardless of actual requirements of a particular ship. The determining factor here is the so-called standard repair list.

Consider another example. This past summer, the submarine aboard which Captain 2nd Rank S. Krylov serves underwent installation and adjustment of a technical system by representatives of an industrial enterprise. The receipt and issue record had not yet been completed and the acceptance report for this highly complex equipment signed, but Navy Main Headquarters let it be known that it was in a hurry for the craft to put to sea. The urgency exhibited by higher headquarters to put the ship on the high seas is understandable, but exerting pressure and shortening the schedule beyond the limits of reason will have an effect on the quality of adjustment of this highly complex apparatus.

Many hopes were raised in the fleet when new combat training courses were introduced in 1987. The hopes were justified to a great extent. The ship commander's burden of organizing combat training was considerably eased. However, much can still be done to leave "living space" for a commander's independence. There was a case where a ship combat crew under the command of Captain 1st Rank V. Prudnikov was using training center simulators to work out the task of moving a ship out of a base within eight hours. The ship's captain believes that the crew's expertise is such that one hour of instruction would be sufficient. However, a document specifies eight hours of training, and the commander can do nothing about it. Rules should not rule out exceptions; otherwise, the former can quickly become an obstacle to development of initiative.

It is unfortunate that even on the high seas and on extended cruises a ship's captain is not free from a leader, one that constantly occupies the bridge, interfering with the running of the ship and often killing the commander's initiative. There is no need to go into detail about the numerous instructions, regulations, etc. They are undoubtedly necessary, but within reasonable limits. Some guidance documents, although claiming to be complete and all-inclusive, cannot make provision for all situations that may arise at sea. Thus, one of the documents covers detection of shadowing of a submarine, listing several procedures. However, the procedures offered in this document are inapplicable to some submarine designs, but they still must be followed. On their last cruise, Captain 1st Rank V. Prudnikov and his ship's navigator developed a

procedure to detect shadowing. It is based on consideration of many factors, including peculiarities of their submarine. Prudnikov employed this procedure on a cruise to successfully detect several "enemy" submarines. This would not have been possible if he had blindly followed the existing instructions.

The point is reached where two different documents covering the same situation require a ship's commander to take two different actions. Take the case of a craft involved in torpedo firing. After completing an attack, the commander is required to execute evasive maneuvers to preclude action by the enemy. This is axiomatic, a product of frontal experience made official by pertinent instructions. However, another document requires that the commander, after firing a practice torpedo, maintain his course and speed and observe the torpedo to prevent loss of the latter. Commanders usually select the second course of action, since nothing will probably come of a poorly executed post-firing maneuver, while loss of a torpedo can be associated with severe consequences.

Main Headquarters and fleet headquarters most likely cannot always see that which is readily visible at the place of occurrence. However, more than that, this is a matter of overemphasis, of a lack of real interest in improvement, in rational application of the human factor to the matter at hand. Let me cite an example. Located in the Barents Sea is Motovka Gulf, which is very wide. In clear weather you can see horizon to horizon, as they say. A commander must maintain practice alert status, regardless of the amount of time—even several days—a ship remains in the gulf. The reason for this is a fleet order, which holds that Motovka Gulf constitutes narrow waters, thus necessitating maintenance of practice alert. Commanders complain that personnel become exhausted by the extended period of stress; in addition, the authority of the practice alert is adversely affected.

"An order is an order and must be carried out," said Assistant Flag Navigation Officer Captain-Lieutenant S. Dovbezhko. "However, when it comes to Motovka Gulf, I think that the commander himself could make a decision to announce a practice alert."

A factor contributing to lack of commanders' independence is hidden in the details of combat training organization. Thus, I heard various officials of our combined unit say that the ship employment plan does not make provision for certain training considerations peculiar to crews of nuclear-powered submarines. An exact amount of time is allotted to accomplish combat training tasks at sea, but in reality much more time is consumed. All this simply deprives the commander of the time reserve that he could otherwise use to fill the needs of his own ship.

"Unfortunately, combat training continues to be planned only at the top," stated Rear Admiral B. Bezkorovaynyy. "The recommendations we submit become a mere formality; the plan as finally approved has nothing in common with them."

As we can see, the picture is less than encouraging. Nevertheless, some improvement has been made. Combat training practice now includes sea exercises in which both sides can be successful, instead of only one side. This promotes the creative aspect in the activities of commanders of opposing ships. Submarine commanders in our combined unit look upon the recently rescinded requirement for formal evaluation of practice firing as an expansion of their authority. This innovation relieves the commander of the need to concern himself with an intermediate result and attain a high rating any way he can, since it is he who evaluates his subordinates. In other words, here again restrictions on the commander's independence have been relaxed.

The above process should progress further. The fact is that, in the final analysis, the problem of a commander's independence is tied to other problems, in the same way that a thread is tied to a needle.

### Three Killed Following Weapons Theft

*/90UM0052B Moscow KRASNAYA ZVEZDA in Russian 18 Oct 89 First Edition p 4*

[Article by Captain 3rd Rank P. Ishchenko: "A Chase with a Tragic End"]

[Text] On 3 and 5 October, Senior Seaman O. Pavlenko and Seaman R. Nurutdinov entered a weapons room unseen during evening check and stole four automatic rifles, more than 1,000 rounds of ammunition, and hand grenades. To cover up their crime, they set the weapons room on fire (which was very difficult to extinguish). The seamen hid the weapons and ammunition in a chimney of the boiler room where Pavlenko worked as a stoker.

Investigators from the base judge advocate's office quickly detected the arms shortage. However, only on 11 October was it possible to arrive at a solution to the incident. Sensing that they were about to be discovered, Pavlenko and Nurutdinov decided to abandon the unit, taking the weapons with them.

The criminals stole a ZIL-130 truck that was being unloaded at a store and abducted an officer's wife—Yu. Mizina—from a neighboring building as a hostage. They headed for the coast, with the intent of leaving the island by launch.

Armed posts, which were set up on routes the fugitives would most likely take, were ordered to use their weapons if the situation so warranted, aiming at the truck's wheels. However, events took a different turn. Only an investigation can ascertain who was first to open fire. There was a heavy exchange of fire. Nurutnikov, wounded in an arm while preparing to throw another grenade, dropped the grenade onto the floor of the cab. The grenade exploded and the truck, out of control, collided with an obstacle.

Pavlenko and Mizina, a young woman who happened to be taken hostage, were killed. Nurutdinov was taken alive.

What can be said about the tragic end to this story? Only one thing: We still have not developed the skill of disarming criminals who take hostages.

It is possible that the thieves would have been caught much sooner if the unit authorities had provided the investigators with a complete description of the malicious violators of military discipline. The fact is that in his two and a half years of service, this particular seaman—R. Nurutnikov—had been found guilty of alcohol abuse, unauthorized use of a motor vehicle, and several thefts. However, military jurists were made aware of this only after the tragedy.

### Conversion: Consumer Goods from Belorussian Plants

90UM0025A Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 23 Aug 89 p 2

[Article by TASS correspondent V. Bogdanovich: "Conversion: The Beginning Offers Hope"]

[Text] As a result of the partial troop reduction, the Belorussian Military District in only six months of this year sold military equipment released by the military valued at almost 800,000 rubles.

"We are about to sell additional equipment, consisting of more than 1,000 motor vehicles, tractors, bulldozers, and 50,000 breathing masks," said Lieutenant Colonel N. Khapkin, rear services staff specialist of the Belorussian Military District in a conversation with the TASS correspondent. "Small farms will receive 150 electric generators at an opportune time. It is no secret that a large amount of property was held 'in reserve' in military warehouses. Having made the decision to rid ourselves of surplus, we are selling outboard motors, chain saws, axes, shovels, individual equipment, tank trucks, pumps, and medical supplies. We hope that their sale will bring in more than one million rubles.

"Dozens of kolkhozes and rental collectives have solved many of their problems as a result of the commercial relationship with us. The national economy and Army also stand to benefit. We all know that it is necessary to erect housing and resolve the problem of providing pensions to officers and warrant officers that are being discharged into the reserve. These are the uses to which a large part of the funds so obtained will be put."

All in all, the military has taken action on a large scale. However, it has set up the commercial ties mainly with organizations, cooperatives, and enterprises. What will be the benefit to the average consumer?

"Already in this year Belorussian defense sector industry enterprises have significantly increased their output of color television sets, radio-tape recorder combinations, car radios, photo cameras, mixers, juicers, and electric meat grinders," said BSSR Gosplan Department Chief V. Samtsevich. "Production of Krot motor cultivators for personal farming has been organized."

Republic schools are being furnished with computer rooms for Korvet and Nemiga computers, while areas that have suffered from the accident that occurred at the Chernobyl AES have received the first shipment of individual radiation monitoring devices. Hospitals have started to receive scarce medical equipment.

It would be desirable to extend the list of goods, of course, but the necessary documentation and plant realignment have not been completed. The year 1990 will mark the turning point for conversion. For example, the increase in television set production at one of the plants will amount to 55,000 units.

The defense sector has also taken over plants belonging to the defunct Minlegpishchemash [Ministry of Machine Construction for the Light and Food Industry and Consumer Goods of the USSR], which "defaulted" in producing machinery for processing agricultural products. I believe that the "defense people", who have a powerful scientific, planning, and design base at their disposal, will be able to rectify the situation in short order. New types of meat processing equipment have already been created in the republic.

Defense enterprises plan to manufacture a total of 109 items of equipment for processing the products of fields and farms. Belorussian milk combines have already taken delivery of the first large-capacity pasteurizing and cooling units, which offer the capability of processing milk rapidly without loss of nutritive qualities. Food producers have good uses for equipment designed for rapid curing of smoked foods.

In a word, progress has been made, and we already notice the benefits. As early as next year the republic's defense sector plants will double their increased output of consumer items compared to 1989. The availability of production facilities, firm technological discipline, and qualified personnel leads us to expect that the conversion plans will be made a reality within a short period of time.

### Conversion: Buran Shuttle Project

90UM0023B Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 26 Aug 89 p 2

[Article by D. Pipko, SOTSIALISTICHESKAYA INDUSTRIYA editor, Scientific and Technical Progress Department: "All the Bounty of the Buran—Conversion May Not Justify Hopes Without General Strategy"; first two paragraphs are SOTSIALISTICHESKAYA INDUSTRIYA introduction]

[Text] Conversion. This concept has to do with reorienting a considerable part of the defense industry toward peaceful goals. It also involves many of our hopes for improving the economy. There are grounds for these hopes. Almost 350 defense plants have already made commitments to produce equipment for the food industry. Two hundred institutes have also undertaken nonmilitary activity.

The magic of large numbers renders conversion into some kind of gift. We already anticipate a golden shower of fashionable goods, appliances, and machines that will wipe out the shortages. However, many people harbor a suspicion: What will it cost us? People's deputies in speeches at the Congress openly stated their fears about our approaching conversion without a scientific strategy. A persistent question was: In our rapid attempt to patch the holes in the economy, will we not squander the industrial potential that will be released?

### Do Your Bit Without Loss

The last session of the USSR Supreme Soviet, in accepting the baton passed on by the Congress, raised even more

doubts. Virtually all those who aspired to government posts—from the minister of public health to the minister of trade—laid out their programs with the hope that they can improve matters in their sectors on the basis of conversion. Listening to them, a person could conclude that defense enterprises deprived of military orders are willing to accept any work. Perhaps even something like metro cars instead of military aircraft.

I had an opportunity to visit plants producing combat vehicles. The systems and units that are assembled there incorporate the latest attainments of science. The manufacturing precision borders on the highest attainable. A struggle is waged with literally every extra gram of vehicle weight. Suddenly the plant is confronted with heavy wheeled wagons running on rails. Is it really necessary to "prescribe" them for shops employing people that are capable of mastering products that are scientifically highly demanding? If they are to make cars, then let them be the kind that fly: those for high-speed magnetic suspension systems that we should have become seriously involved with some time ago.

The picture that was painted portrayed a situation that consists of knotty problems for both scientists and specialists of the aviation industry. Conversion has presented them with a contradictory task that may be described as "do your bit without loss."

"Until now, the defense sectors were numbered among the few in which development proceeded on the principle of direct competition with the West," stressed Academician I. Fridlyander. "They were constantly guided by the rule of working to take the lead and always improving their products. If a potential enemy came up with some kind of innovation, we were to immediately create something similar or even better. Hence the high level of research and development. How is this level to be maintained in collectives that lose defense orders?"

"We run the risk of losing our posture of rapid mastery of new technology that has long been encouraged in the defense sectors," added G. Lozino-Lozinskiy, general director and chief designer of the NPO [Scientific Production Association] Molniya. "We all know how rare and difficult it is for most civilian enterprises to make the change to new models of machines, equipment, and appliances. If we follow their practice, we can just forget about maintaining a high level of domestic production."

"A change to new products is always associated with large losses," said First Deputy Minister A. Bratukhin. "Even changing production from a particular airplane model to one of another design requires substantial retooling. Reconstruction will consume a great deal of time in connection with our 'perestroyka posture.' And if the product happens to be completely new... You can expect workers' wages to plummet, with the added danger of losing cadre. Those that do remain will require retraining. For this reason, the product an enterprise selects to replace defense work should at least justify all that. Otherwise conversion will bring losses instead of offering an advantage."

My collocutors were not exaggerating. Aircraft construction is in a relatively favorable position as far as the conversion plan is concerned. The economy demands aircraft and helicopters; all we have to do is supply them! God himself ordered us to collaborate with the medics, who are crying out for modern equipment. The aviation industry is charged with providing fruit and vegetable enterprises with new equipment. In addition, consumer goods output must be increased by 1.5 times next year.

However, I would be less than truthful if I did not mention that in the sector there is hidden resistance to conversion. More accurately, to attempts to foist harmful tasks. Everyone understands that it is more advantageous for a plant to produce aircraft, such as the TU-204 passenger liner, for example, as a replacement for the giant carrier Ruslan, rather than change to baby carriages or metro cars. It is even more advantageous to continue to produce the Ruslan, which has cost much in the way of money and effort.

I sat there and listened as specialists spoke favorably of military air transportation authorities' intention to expand civilian freight hauling. But they asked in this regard: Will orders for heavy transport craft continue to be made? I recalled a concept that was expressed on the eve of the air show at Le Bourget: using the largest Soviet and foreign aircraft to comprise an international consortium. The idea is to deliver large amounts of freight to any point on the planet. The "candidates" mentioned were Soviet planes such as the AN-225, IL-76, and, once again, the Ruslan.

Underlying these attempts is the clear understanding that **the most economical conversion route is associated with a search for peaceful applications of military items that are in production at the present time**: tractors, radio sets, aircraft. This gives rise to another question: Why not continue to produce the Ruslan and other "high-level" products and try to put them on the world market? The resulting currency could be used to purchase common machinery, medical equipment, and production lines for vegetable producers.

This approach does more than stay away from excessive realignment expenditures. Academician N. Amosov in speaking from the session's tribune cautioned the deputies against entertaining too many hopes for defense enterprises that promise to manufacture medical equipment. He stated that the leading foreign firms have been operating successfully for decades and accumulating experience all the time. It would not be a simple matter to catch up with them. According to this viewpoint, the major advantage to exports lies in that we would acquire much sooner the appliances, equipment, and production lines than if our designers were to think them up from zero, so to speak.

#### **From the Bond of Secrecy**

We must be realists, of course; we cannot buy everything, nor will there be a desire to sell us everything. For this reason, many enterprises will be faced with the problem of coping with mastering the production of non-military items, something that will require considerable financial

input. How will the money be obtained? Are they to wait for help from the government? Not necessarily—they can earn it themselves. In the opinion of specialists, **the most rapid effect that can be obtained from conversion would be by transferring the high technologies and materials from the defense sector to non-military sectors.**

I can foresee wry smiles on the faces of skeptics: Many enterprises will not accept technical innovation - not even at no cost. Shortages and the monopolistic situation have enabled them to "push" obsolete products for decades without worrying about quality improvement. The change to financial accountability has exacerbated the situation, with the phrase "we are counting our money now" justifying the stagnation. Who will buy the expensive technologies and materials?

"Even we harbor doubts," agreed A. Bratukhin. "But we are also aware that many difficulties associated with innovation are due to poor organization and shortages of equipment and raw materials. Instead of being provided with "turnkey" materials and technologies, enterprises must come up with the latter themselves. For this reason, we intend to search for forms of sales and mastery that would be advantageous both to us and the customer."

"The task is to render this innovation transfer process continuous," added R. Shalin. "We should start with materials and technologies from the Buran - Energiya complex, the high level of which has been proved in practice."

Much has been written about the heat-resistant plates that protect the Buran as it reenters the dense layers of the atmosphere. When you pick up this white plastic for the first time, you may be bewildered: It weighs about as much as foam plastic. Contrary to the thinking that armor must be monolithic, this protection from fire consists of 95 percent of ... space. Only 5 percent of the volume is occupied by specially developed superthin quartz fiber.

The space armor is 7 times lighter than water. However, this does not prevent it from withstanding up to 1,300 degrees of heat. Even a thin layer subjected to a scorching flame is capable of maintaining room temperature on the other side. Vehicles of rescuers and firefighters protected by this "armor" would be indispensable in forest fires, mine accidents, and on oil and gas fields. It is too bad that they were not available in the area of the accident that occurred in Bashkiria.

"The VIAM [All-Union Scientific Research Institute of Aviation Materials] and NPO's Molniya and Tekhnologiya that developed this material can deliver it to any industry in any amounts," said A. Bratukhin, "and they are willing to help in its use."

No, this is not largesse on the part of the seller; it is merely common sense. The manufacture of this plate is a high-precision process that not everyone would take a risk on purchasing. To endow it with strength, for example, the quartz fibers must be welded together. This is done by depositing extremely small balls of a surface-active substance on each fiber. The material remains fairly pliant

even after welding. The finishing process entails special procedures which only the aircraft builders are able to perform. Only they know the secrets of repair: You would not discard a plate costing 300 rubles simply because an edge is broken off.

"The heat-resistant plates for the Buran are exotic, and the circle of users is limited, of course," continued G. Lozino-Lozinskiy. "But they make it possible to prevent losses in extreme situations, if they are especially significant. Hence the problem of the conversion tactic. It would be possible to go the 'wholesale' route, of course, attempting to gain a large advantage by massive application of simple and accessible defense developments. However, in my opinion, **conversion should be guided by the rule: Take from the defense sector primarily that which seems to offer a new quality, a solution to unresolved problems.**"

One of these developments is an aluminum alloy for the Energiya rocket, which employed liquid hydrogen for the first time in domestic practice. The tanks are made of a material capable of withstanding temperatures close to absolute zero—minus 253 degrees. The difficulty of the task would be appreciated by anyone who has heard about the problems involved with creating equipment for the Far North: At 50 or 60 degrees below zero, the best steels become as brittle as glass. Parts made of them disintegrate. Efforts were successful in finding for the Energiya an alloy which increases in strength by a factor of 1.5 as it is cooled to the temperature of liquid hydrogen!

"Yes, this material is indispensable for machines and mechanisms to be used in the north," confirmed R. Shalin. "In addition, if it is also necessary to reduce weight, there is a superlight aluminum-lithium alloy first developed by Academician Fridlyander. It also becomes stronger and more plastic as temperature is reduced to nearly absolute zero. We developed it for fuel tanks to be used on hypersonic aircraft of the future. And it can also be successfully employed in tundra."

My collocutors saw me as some kind of future customer. For that reason, they brought out other new ideas from the bond of secrecy.

"To reduce noise in textile factories, we can offer a special aluminum alloy to produce gears for looms."

"If the porous plates from the Buran are 'impregnated' with aluminum melt, the result is a material for piston heads that makes it possible to raise an engine's compression ratio and improve operating characteristics."

"You can coat the exhaust pipes of the same vehicle with our heat-resistant enamels to prevent corrosion."

"If a special substance called 'argonit' is applied to the inner surface of bearings, they will function without any lubrication with virtually no wear."

"Even a thin layer of our sealants prevents leaks down to negative temperatures."

"Conversion demands imagination, bold thinking," G. Lozino-Lozinskiy said suddenly. "Remember the black

nose and the wing leading edges of the Buran? They are made of a superheat-resistant material that can withstand up to 2,500 degrees. Who do you think showed the most interest? Medics!"

Let us dwell somewhat on an area of technology. If you dissolve carbon particles in some substance, immerse carbon fibers into this mass, and burn out the solvent, you obtain a material of the "carbon-carbon" type. Research has shown that it is inert with respect to live tissue and is not rejected by the body. For this reason, it is indispensable in a wide variety of "spare parts" for humans—from joints to—of all things!—new teeth. The root of a tooth is implanted into the gum, and the upper portion is covered with a plastic or porcelain crown to conceal the black color. There are other applications where medics successfully collaborate with the creators of this material from the NIIgrafit [Scientific Research Institute of Graphite] and the NPO Kompozit.

#### Composites Have Landed

Today designers and technologists of the most advanced enterprises are not studying electronics; they are involved with the principles of textile production, instead. To be more accurate, with the properties of fibers. Their "fascination" is with composites, which are fundamentally new materials. To be even more accurate, they are studying the discovery that any substance that is made into a fiber exhibits an unprecedented increase in strength. When this fiber—acting as reinforcement in concrete—permeates an item made of carbon, plastic, or aluminum, the item becomes much stronger.

Items made of composites are at least 1.5 times lighter than metal and offer two to three times more reliability, while their manufacture is 30 percent easier. Created for aviation and space technology, such as for the Buran, they are more than ever coming down to this sinful earth, where uses are being found in a wide variety of sectors. Foremost is the automotive. Many foreign firms are already attempting to employ these composites in leaf springs, bumpers, drive shafts, suspensions, gas cylinders, fuel tanks, body sections, and bodies proper.

At a European conference on composites that was held in Paris this past May, it was stated that in the next few years parts made of them will comprise 25 to 30 percent of a motor vehicle's weight. This is what "they" plan to do. In our country, the secrets and equipment required to manufacture parts made of composites are held mainly by defense sectors. That is why I asked my collocutors the following question:

Why can't your plants provide the VAZ with light and long-lasting motor vehicle bodies made of composites?

"We can produce entire motor vehicles, including the engines and all equipment," countered A. Bratukhin immediately. "In that case, who will produce fixed-wing aircraft and helicopters and improve their characteristics, if not we?"

That was the kind of reply I expected; I can understand the aircraft people. Composites make up only 4 to 4.5 percent of the Ruslan's weight, while by the end of the century their weight must be brought up to at least 25 percent. The creators of the IL-96 and the TU-204 set their goal at 17 to 18 percent. However, helicopter designers are already working on craft in which composites are to comprise as much as 65 percent of the weight.

"You can see for yourself," concluded A. Bratukhin, "that existing capacities for producing items made of composites for our own uses are limited. There is another reason, however. If we really consider composites to be materials of the future, this means that all sectors should start now to learn how to work with them. Our task is to go further, accumulate experience, and, if necessary, remove the many barriers that still exist."

My collocutors unfortunately did not dispel doubts relative to prospects for wide application. The impression they created was that much of what they offer is accessible only to large enterprises. The majority of medium and small ones, of which there are tens of thousands, simply cannot afford expensive technologies and materials. Also, most consumers are always wary of innovation. If enterprises were to attempt to introduce these particular composites, for example, they would first find it necessary to try them in several parts. Who is willing to purchase expensive equipment to do that?

"It is necessary to change the way in which they can be introduced," agreed A. Bratukhin. "It should be so arranged that innovations that are too expensive for a particular enterprise can be mastered on a share basis. Many enterprises would be willing to take a risk under those conditions. For example, our ministry saw fundamentally new possibilities while viewing the local Moscow program "Progress-95." Wherever the branch approach cannot be applied, it is necessary to set up interbranch local arrangements."

The possibility of enabling a wide circle of enterprises to accept the conversion baton is not the only advantage these "share" plants have to offer. Production costs can be reduced substantially as a result of their high output rates. In a word, interbranch production arrangements can become one of the more reliable introduction channels. A question remains: What will we supply to them?

#### Market or Gosplan?

In conceptualizing our grandiose plans, we sometime behave in an overly naive manner. It is quite possible that many persons are not aware that until recently all our big decisions pertaining to wide introduction of composites were nothing more than words. The stumbling block was special units—autoclaves. Under the action of temperature and pressure in their chambers, synthetic resins surrounding the fibers are polymerized and become solid. Finished products are obtained at the outlet.

"If these products are motor vehicle bodies or an airplane section, the autoclaves must be sufficiently large," stressed R. Shalin.

For many years, autoclave units provided with automatic systems remained on the list of scarcities. For example, the aviation industry was forced to purchase them from the FRG firm of Scholtz, paying an average of 400,000 dollars. In our country, the sole manufacturer was the Uralkhim-mash [Ural Heavy Chemical Machinery Plant]. Although the price rose from 400,000 to 900,000 dollars, it refused to change its attitude: It wanted no new orders.

The situation was saved by Academician B. Paton, who headed the state scientific and technical Promising Materials program. He had close ties to Atomash specialists in the area of welding. Upon learning that the association was losing out on orders for AES equipment, he suggested that it undertake the manufacture of autoclaves.

This story has an almost happy ending. However, in many cases attempts to borrow the experience gained by defense enterprises can run into the same obstacle. Hence the condition: **Conversion programs should be set up to include production of the necessary equipment or make provision for production of such equipment.** By the same token, there already is an indication of a threat that wide distribution of many innovations, particularly composites, will be hindered by scarcity of raw materials.

"All the world is using carbon plastics to make household items, tennis racquets, bicycles, skis, and ice skates," stressed G. Lozino-Lozinskiy. "But here... It is possible that someone feels that sports are not one of our more important problems. Nevertheless, take agriculture. That is where even simple fiber plastics can prove enormously useful!"

In barnyards, where something is always leaking or rotting, corrosion-resistant pipes and tanks made of fiber plastics can become indispensable. They can be used to make silos, fertilizer vehicles, and tanks for highly reactive chemicals. All these items would last at least two to three times as long as ones made of steel. If we realize that fiber plastics are much lighter than metal, we can see that one ton can replace 4 or 5 tons of steel. Finally, the material utilization factor in the case of steel articles is less than 50 percent, while in the case of fiber plastics it is as much as 90 percent.

The result is that one ton of these very simple composites theoretically replaces 12 to 15 tons of steel! It remains to say that production organization for one million tons of fiber plastics costs about the same as the creation of capacities to produce one million tons of rolled metal. The question here is: Which is the more advantageous investment of money?

"Unfortunately, our planning organs remain faithful to ferrous metals," continued I. Fridlyander. "We produce almost twice as much steel as the USA, but we still experience a chronic shortage of construction materials. The Americans are willing to share their output, since they prefer plastics and composites. If we do not make a change

in policy in favor of capital investments in polymers, many aspects of conversion, particularly attempts to adopt progressive technologies, will be frustrated by shortages of raw materials."

We can obtain a relatively clear picture by comparing material output in tons. Yes, 1988 steel consumption in the USA amounted to about 100 million tons, while the figure for plastics and fiber plastics is something less than 28 million tons. In our case the figures are 162 and about 6 million tons, respectively. "Yes, that is quite a difference," retort advocates of metals. "But you should realize that they make more steel." As if they did not know that designers are much more interested in the volume of materials than the weight. Converted into cubic meters, the data tell us that the USA is using 1.78 times more fiber plastics than steel, while we are using 4.3 times less.

Clearly, this kind of difference cannot be eliminated by setting up arrangements between enterprises or even branches. The situation can be changed only by instituting a tough, consistent state policy. Who will develop and make it a reality? Has the time not come to create a special governmental organ that would take charge of conversion management? My collocutors, who are wary of the overabundance of supervisory organizations, answered with a categorical "no." However, ...

#### Horizontal Progress

Defense sectors, which until recently looked down upon other sectors, are now forced to think about how to keep their enterprises busy, what to sell, and how to do that. In their scientific research institutes they hold exhibitions and gatherings for throngs of civilian who ask prices and gasp when told. Acquaintances are made, counteroffers advanced, and joint programs drawn up. However, this process has the ring of bazaar haggling, with overheated merchants arranging for the country's future to "come under the hammer." Once again the thought comes to mind that **flexible state regulation of conversion is required.**

I foresee violent opposition on the part of proponents of pure market relations. I wish to remind the reader that Japanese firms, for example, did not act without control in their acquisition of foreign licenses. A special government committee looked very closely at what advantage a particular technology or product would offer the country, and whether this would promote future progress. Continued belief in the market with its vagaries does not hinder Western politicians from insisting on passing special laws on conversion and creating disarmament councils.

"What has been said does not mean that we must blindly follow their practice," said I. Fridlyander. "All the more since our views of conversion differ. There it carries a threat of overproduction and unemployment. In our case conversion is not simply disarmament; it is also a means to correct the economy, especially by reducing the scarcity of goods and services. This hardly requires setting up laws or control organs. For conversion to make progress as it should, it is merely necessary for people to know its strategy and main idea."

This kind of idea does exist. Today even the most advanced countries would not think of their development in terms other than international division of labor. We simply will never remove the impasse if we do not start to sell on the world market that which is advantageous, not what we prefer. At a cheap price. And we must purchase that which makes no sense to try to produce ourselves. According to this point of view, **conversion is the most realistic, if not the sole, possibility of raising the level of products so that we can break into and establish a foothold in the world market.**

We all have heard it said a number of times that if our designers and technologists had access to all the modern materials they require, they would be on an equal footing with their foreign colleagues. This being the case, the solution is obvious: Compile, on the basis of the best examples of products we are presently manufacturing, a list of components that are hindering competition. Then task the respective defense enterprises with their production. In essence, what we are saying is that **conversion makes it possible to shift the bounds of responsibility for non-military production onto the shoulders of defense sectors.**

There are possibilities for the above. Considerable ones, at that. In the same aviation industry, any aircraft plant merely sits on top of a pyramid. Located somewhat below are enterprises that supply it with engines, systems, assemblies, and equipment. Lower yet are metallurgical and various other plants. If the head plant were to stop producing military items, they all may be left without work. This in spite of the fact that much of what they produce can be subjected to minor "correction" and successfully applied in civilian production. Why not go that route and legitimize it by means of state orders?

Yes, I should have written a year ago that all products that stand a chance of being put up for export should be made to go through a filter of nondepartmental expertise. Items that do not pass scrutiny should be worked over to be made suitable for conversion. However, we all are starting to understand that even the government should employ economic levers, not orders and prohibitions. Only in this way will each plant be forced to subject to critical evaluation not only its export potential, but also the possibilities of paying its suppliers for high-quality components. Then it alone will decide if it can break into the world market.

Lastly, we all must finally understand that **conversion is not a ticket for a lottery where there are no losers, but merely a chance that must be utilized skillfully.**

## Plants' Experiences with Defense Conversion Discussed

### Plants Assess Changeover

904A0019A Moscow *PRAVITELSTVENNYY VESTNIK* in Russian No 18, Sep 89 p 10

[Reports by TASS correspondents Ye. Savinova, G. Kokukhin and Ye. Tkachenko under "With No 'Secret' Stamp" rubric: "Conversion—Action!"]

[Text] *In its last issue, PRAVITELSTVENNYY VESTNIK published an interview with CPSU Central Committee Secretary O.D. Baklanov. The conversation, in particular, was about the political and economic necessity of the conversion of the defense production in our country and of switching part of the capacity of the defense complex to the production of consumer goods and output for civilian use. The readers are turning to the editor's office with the request for more specific information about how defense enterprises are approaching conversion. On behalf of the editor's office, TASS correspondents visited three plants, where the transition to the issue of nonmilitary products must take place in the near future. We are publishing their reports.*

### Seven Feet Under the Keel!

It was quite recently that even the enterprise workers could enter this shop of the Leninskaya Kuznitsa Plant only with special passes: the production was secret. But now the building slips are already being prepared to accept fishing industry trawlers and seiners.

They propose to carry out full conversion at the enterprise by 1992 and the collective has much to do, difficult work, about which they are talking quite frankly at the plant.

"True," said acting enterprise director V. Sopryazhinskiy, "previously we also built fishing boats and dredges along with 'defense material.' The technology is known, there will be no substantial change in labor intensiveness, and the expansion of the production of new output will not be too much of a burden on us. A more important question is how precisely to fill the capacities that have become available so as not to lose profit and therefore earnings. Specialists from the plant's central design bureau developed projects for a medium-sized fishing trawler and a small seiner intended for the Baltic and North seas. The technical specifications of both boats meet the most up-to-date requirements. Talks are now under way on the signing of a contract for the delivery of one such boat to the GDR."

As calculations showed, however, all of this is too little to keep the total profit at the "pre-conversion" level. This is why they intend here to bring about a significant increase in the production of goods for the people. As early as next year, its volume will increase by a million and a half rubles

in comparison with the current year. At Leninskaya Kuznitsa, they even decided to put up a new shop for consumer goods. Its construction will be one of the links in the complex reconstruction of the enterprise, which was made necessary by the conversion. Because now, instead of one military vessel, let us say, the plant will have to produce several industrial ships. This means that the equipment will be used more intensively.—Ye. Savinova, Kiev.

### The Plant Is Changing Its Profile

This small kitchen machine will do a lot: chop cabbage and slice bread, grind coffee grains and knead dough, squeeze juice from berries and prepare stuffing for cutlets....

"Along with other consumer goods, we will produce such a processor instead of military output," relates N. Babichev, deputy director of the Yoshkar-Olinskiy Machine Plant. "It has been decided to give our enterprise a completely new profile beginning in 1991...."

Will the plant experience losses from conversion? Yes, and there are two ways to make up for them and to preserve the collective. The first is to increase the production of bicycles, which was developed along with the basic production. In 1990, the enterprise will increase the output of two-wheeled vehicles to 700,000. The second way is the assimilation of new and nontraditional product, specifically the organization of the production of a kitchen processor.

"But we will have to overcome many serious problems," continues N. Babichev. "They are proposing to us, for example, that we increase the production of bicycles by more than 20 million rubles but many suppliers are not prepared for this. They are having trouble meeting our current requirements. Thus, there are preliminary agreements on only 3 of the 19 completing products for 1990! We are being let down in particular by subcontractors from Khabarovsk, Voronezh, Kirov and Daugavpils that are supplying the plant with aluminum sections, bicycle tires, pumps and chains. But the Mariyskoye Territorial Administration of USSR Gossnab does not take into consideration planned growth."

A special subject in all the conversations having to do with conversion is the preservation of the privileges of those who are now employed in specialized production. Otherwise some of the people will leave the enterprise. But such a thing, they think at the plant, cannot be permitted in any case. For it is a matter of highly skilled workers with exemplary diligence and discipline.

Extensive use is being made of new management methods to keep personnel at the enterprise. Here, for example, we have organized a production cooperative of foundry workers called "Plamya." The average monthly wage of the cooperative workers is 600 rubles. Prior to the establishment of the cooperative, the plant was forced to enter into contracts with the Kama Motor Vehicle Plant and other enterprises for the delivery of cast material. The situation is now quite different: the cooperative continuously supplies all of bicycle production with its output.

"Not only good wages but also full economic independence are creating interest in the matter," affirms N. Lisov, chairman of the cooperative. "We are prepared to provide high-quality cast material for the production of a million bicycles a year...."

"Precisely the introduction of cooperatives and leasing—and these forms of the organization of labor are already in operation in the shop for nonstandard equipment and in the plastics and repair-construction sections—will make it possible for the plant to overcome many difficulties brought out by conversion," comments A. Tur, chief of the technology division of the textile research institute of the Ministry of the Defense Industry. "As for the technical area—project planning, the development of drawings for equipment and products and the issue of the necessary procedures and recommendations—there are no questions here. Our institute is controlling the preparation of the plant for reprofiling and is prepared to give it any assistance that it can."—G. Kokukhin, Yoshkar-Ola.

### Although the Prospects Are Clear

The production of specialized output and the assembly of new equipment for the manufacture of components of a home refrigerator are taking place simultaneously under the roofs of a number of leading shops of the Yuryuzanskiy Machine Plant imeni S.M. Kirov. And the area for "defense production" is being reduced systematically. Beginning in 1990, the enterprise must shift completely to the production of peaceful items.

This is a complex process. Many troubling problems are arising.

"In the current year, for example," says plant director A. Sapozhnikov, "there are simply no centralized appropriations for industrial construction and technical reequipment, which, strictly speaking, are supposed to convert the material base."

The issue of Yuryuzan refrigerators, which are in great demand among the population, was organized in adapted premises. It is incredibly crowded there and under such circumstances it is simply impossible to think about increasing the output and raising the quality of products. This is why the reorganization of the production of refrigerators and the construction of new facilities worth 10 billion rubles began even before there was talk of conversion. It would seem that today it is necessary to work with the maximum effectiveness here. But the Uzhuralmetallurgstroy Trust has fulfilled less than 50 percent of the plan. But at its fault equipment valued at a million rubles has awaited assembly at this most important facility since last year.

"If things keep on going this way, it will be difficult to find jobs for workers and engineers being released from 'defense production,'" states the director, "although for the long term we calculated full employment of all personnel and basically without loss of wages. We will increase the output of refrigerators. A new model is being

developed that will have improved performance characteristics. Knowing our high technical potential, representatives of the processing industry of agriculture turned to us. A design group and a new section where production that we are not accustomed to is being assimilated have been established to fulfill their orders."

"But the biggest question is the social question," said Yu. Vilkov, chairman of the council of the labor collective. "It is especially disturbing to those who are preparing to be pensioned under privileged lists for work in dangerous production. We made the corresponding proposals to the USSR Ministry of the Defense Industry, USSR State Committee for Labor and Social Problems and AUCCTU. It is necessary to compensate for possible losses! In general, however, the appropriate decision needs to be made even before the confirmation of the conversion schedule...."

And about still another problem. For some reason, the agitation and concerns having to do with the reprofiling of a portion of the military enterprises affected only them. And what about the suppliers? For it is no secret that today the conveyor for the assembly of refrigerators is continuously feverish from the untimely delivery of compressors and electric motors. What will happen when the people at the Yuryuzanskiy Plant are able to issue substantially more household equipment?—Ye. Tkachenko, Chelyabinsk Oblast.

#### Military Industrial Commission's Views

904A0019b Moscow PRAVITELSTVENNYY VESTNIK  
in Russian No 18, Sep 89 p 11

[Commentary by V. Komarov, department head of the State Military Industrial Commission of the USSR Council of Ministers]

[Text] The defense complex produces much output for civilian use and consumer goods. Their relative share in the total volume of production is now 40 percent. It will reach 49 percent in 1990 and will exceed 60 percent in 1995. As early as 1990, it is planned to begin to carry out conversion at half of the enterprises of the defense complex. It can be said that these are the basic parameters of the state conversion plan, the elaboration of which must be completed in the fourth quarter of the current year.

The plan is still being elaborated but the conversion has already started. In 1989, for example, the output of military equipment will be 95.5 percent of the level of the past year, even though it was previously proposed that it be increased by 5.5 percent. On the other hand, the production of civilian output will increase by 8.9 percent this year (an increase of 5.7 percent was planned). In the coming year, the production of civilian output will be 13 percent more than in the current year and that of consumer goods will increase by more than 30 percent.

The following figure is also rather interesting: the defense complex is already issuing about 22 percent of all nonfood consumer goods produced in the country (not including the production of light industry). Of them, it issues 100

percent of the televisions, video recorders, sewing machines and radio receivers, more than 97 percent of refrigerators and more than half of the motorcycles. It is anticipated that in 1990 the defense complex will increase the manufacture, for example, of washing machines by 36 percent and vacuum cleaners by 25 percent and that the production of televisions will exceed 11 million units. In the process, of course, subcontractors must ensure the corresponding increase in deliveries of materials and completing products for enterprises of the defense complex that are expanding peaceful output. For the time being, as we see from the reports received by PRAVITELSTVENNYY VESTNIK, there are not enough completing products even for the current volume of production.

If we speak of the priority directions in the utilization of the production potential now being freed from military orders, they include production of equipment for the agroindustrial complex, for trade and public catering; the manufacture of consumer goods; the production of electronic, computer and medical equipment and the means of communication; and the civilian construction of aircraft and ships. It is planned in the next five-year plan to double the output of production equipment for the agroindustrial complex. In 1995, it will be given at 3.8 billion rubles—82 percent of all that is produced in the country. It is foreseen that in 1995 the defense complex will produce 2.3 billion rubles in production equipment for light industry, which is 87 percent of the national volume. The picture is analogous in other priority directions, as mentioned above.

There is a prevalent opinion that the "defense industry" can and must participate in the realization of practically all programs for social and economic development. But there are at least two reasons why this cannot be done.

In the first place, it would be strange if enterprises with high production standards and the richest technical and technological traditions used this unique potential, for example, for the establishment and production of garden implements for the members of suburban cooperatives.

Secondly, the possibilities of the defense complex are not unlimited. Thus, the value of its fixed capital is just 6 percent of the value of the production capital of the national economy as a whole.

The participation of the defense complex in the realization of a broader range of tasks of a nonmilitary nature will require a drastic renewal and modernization of fixed capital. But the strained financial situation in the country simply does not permit this to be done. Because even at the enterprises that will be encompassed by conversion in the coming years, as is apparent from the reports of the TASS correspondents, the workers are concerned about the shortage of funds for the renewal and reconstruction of fixed capital. And the tasks ahead are somewhat more complex.

In short, major capital investments and the corresponding material and technical support are necessary for reprofiling, technological equipment and preparation for the new production of output at enterprises subject to conversion.

At the present time, the magnitude of these means and resources are being calculated by the ministries and, with the help of USSR Gosplan, they will be determined in the draft plan for the conversion of military production.

Preliminary studies already indicate that a significant share of the appropriations that will be freed in the process of conversion must be spent on the restructuring of technology, the transformation of equipment and instrumentation, the updating of production and the retraining of personnel. Additional complications are also linked with the fact that by and large it is planned to carry out the reorientation of capacities without stopping production. This is one of the most complex questions. Naturally this transition will be less painful at such enterprises as, for example, the Leninskaya Kuznitsa Plant. But the Yuryuzanskiy Machine Plant experienced serious difficulties and obviously is continuing to experience them because of the slow pace of construction.

At the same time, it is obviously necessary to draw the attention of the ministries and departments of the country's national economy and of the USSR Ministry of Defense to a more efficient utilization of the equipment being released in connection with the reduction of the army.

The expansion of the production of peaceful output also requires—and the workers of the defense enterprises taking the course of conversion are talking about this frankly—that supplemental means be found for the compensation of unavoidable losses in wages. The economic incentive funds must be maintained in their previous volume. Otherwise skilled personnel may be lost. For this reason, the State Military Industrial Commission of the USSR Council of Ministers intends to prepare, along with the plan for conversion, a number of proposals on questions involving the employment of workers from defense branches, their retraining and the payment system in this period, and the granting of pensions.

The rational utilization of the scientific potential of defense branches is extremely important. It is planned to preserve the capacities of research and experimental design institutions being released from the development of arms and military equipment, changing the direction of their work, of course. As early as this year, 250 production processes and 130 types of progressive equipment have to be turned over to civilian branches. But this work must be systematized: establish control over the transfer of technology and think through the questions of the personal interest and responsibility of the sides. It is proposed that in the 13th Five-Year Plan expenditures for research and experimental design work on civilian subjects (ministry budgets, agreements with customers, own sources) increase an average of 4 percent a year. This is no longer the notorious remainder principle that for many years has been "restraining" the creation of new civilian products and goods for the people.

And one last thing—in order of mention but not of importance. A most important task that remains is the

support of the level of defensive sufficiency and the ensuring of a high scientific and technical level of military equipment.

[Boxed material] The issue of complex household appliances will reach the following levels in 1995:

TELEVISIONS—15 million units (increase of 34.2 percent over the level of 1990), including 12 million color televisions (increase of 62.6 percent); REFRIGERATORS—9 million units (increase of 32.4 percent); SEWING MACHINES—3.5 million (increase of 84.2 percent); WASHING MACHINES—7.2 million (increase of 21.5 percent); ELECTRIC VACUUM CLEANERS—7.0 million (increase of 32.1 percent); VIDEO RECORDERS—2.3 million (increase by a factor of 5.1); MOTORIZED BLOCKS AND MOTOR CULTIVATORS—660,000 (increase by a factor of 2.6).

### Bicycles From Space Systems Plant

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[Editorial Report] Moscow's MOSKOVSKAYA PRAVDA publishes in the 14 September 1989 edition in Russian an unattributed page 1 article entitled "Space Equipment Factory Declassified". The article notes that the Moscow Machine-building Factory imeni M.V. Khrunichev, which produces orbital vehicles, space modules and the Proton booster, also manufactures the "Druzhok" line of children's bicycles. The Japanese have placed an order with the factory for 50,000 units.

### Process of Conversion in PRC

90UM0008A Moscow KRASNAYA ZVEZDA in Russian 29 Sep 89 First Edition p 3

[Article by Lieutenant Colonel V. Belichko, candidate of economic sciences: "Conversion in China"]

[Text] "Bao Mi Gong Chang"—"secret factories." In the past, according to evidence in the Chinese newspaper TSEKKTSEN ZHIBAO [transliteration], only a few people could visit them. And now, thanks to the "policy of openness," the PRC press got the opportunity to cover various problems at these enterprises which are a weighty portion of the nation's industrial potential.

### A Little History

The stories on the pages of many newspapers state that previously the heads of defense plants and their collectives did not know what cost accounting in military production was. In the best case, profitability totaled several percent. Military industrial enterprises did not know what a search for raw materials was and did not have problems with sales of manufactured products. Recommendations to produce consumer goods using excess production capacity were often ignored. The ministry regulated the activities of enterprises right up to small details. Having completed an order (under conditions of a military representative's positive finding), the enterprise "hoisted a red flag" and reported to Beijing. The RENMIN RIBAO asserts that the

NOAK [Chinese People's Liberation Army (PLA)] Main Rear Services Administration could even transfer monetary assets via a telephone report to an enterprise for output produced when an order was finished.

### The Turning Point

It occurred after 1978 when the 3rd Plenary Session CPC Central Committee of the 11th NPC outlined a broad reform program. The course to its completion, to new methods of management and control, and to the "emancipation of consciousness" also introduced adjustments into the development of military industry. According to press reports, the first reform measures were extremely difficult. In conditions when the number of military orders (and, therefore, their raw materials and resources) began to be reduced, enterprise collectives frequently made extreme decisions—either they demanded new military orders from the ministry or they attempted to direct their main efforts at beginning production of civilian output.

The experience of the beginning of the 80's showed that it was impossible to depend only on military orders as previously—army reductions were being prepared and military equipment policy was being changed with its requirements to produce more modern military equipment. The conversion of a portion of military production occurred with difficulty and huge losses (economic and morale) for the enterprises. For example, Shanxi Province defense plants managed to set up production of civilian goods during a comparatively short period of time. But at what a cost! The first year of their management in new conditions (formation of new markets, increase of commodity—money relationships, "socialist competition," etc.) ended with huge financial losses totaling 3 million yuan. Some of the workers, not having received half of their wages, engaged in seasonal industries: They worked in the services sector, cut rock, or made simple domestic utensils.

### Decision and Action

Prescriptions for getting out of the existing situation and methods for improving the military economy were sought everywhere, both in Beijing and locally. Since September 1988, PRC Gossovet [State Council] and Goskomitet [State Committee] on Defense Science and Technology have been developing specific recommendations for transitioning defense sectors to new management methods. They emphasized the nationwide significance of including defense sectors in economic reform in their decisions and they outlined techniques to increase the self-sufficiency of military-industrial enterprises and to ensure the effectiveness of cost accounting in structural subdivisions which had transitioned to production of consumer goods. One of the resolutions stated that the use or lease of part of military production for production of civilian goods is not a temporary campaign but a long-term strategic policy.

Today production of civilian goods totals up to 50 percent or more of the production capacity of defense sectors. The most modern technological processes operate in sectors and at enterprises where a significant portion of their

skilled scientific and technical personnel are concentrated. It would appear that the quality of output and a high demand for it are ensured.

But there are difficulties—bureaucratism. The newspaper TSEKKTSEN ZHIBAO at one time covered in detail the ups and downs of a Guychzhou [transliteration] Province electronics industry company director's struggle with bureaucratic impediments. This company was one of the first in the defense industry to transition to cost accounting. It turned out that bureaucrats of one of the military-industrial ministries impeded in every way possible transfer of the rights for controlling production of civilian output while dictating from Beijing what and in what volumes to produce it, where and at what prices to sell it. Such departmental diktat naturally resulted in millions in losses. And, on the contrary, having been freed from it, the company literally became profitable in two years and total profits obtained by plant 21 which is a part of it exceeded 18 million yuan.

The establishment of hundreds of such companies within which not only military-industrial enterprises but also scientific-research institutions and even PLA rear services units are now participating, permits us to talk about the birth of a new organizational form of producing civilian output at military enterprises and military-industrial associations. Now they, similar to the widely known in China Chuntsiiskiy Tsayalin [transliteration] Machine Building Association can not only consist of military but may also include civilian enterprises. This union which joins modern equipment (mainly, military plants) with the market and the consumer permits the insurance of the growth of volume and quality of manufactured output and also marketing which is important for the Chinese and the international market.

Let us add that the number of enterprises entering into an association may reach a hundred or more. They supply automobiles and motorcycles, equipment for light and heavy industry, aircraft and diesel engines, radio and electronic appliances and electrical equipment, and also high performance computers and other high technology products to the domestic market and abroad.

### Prospects and Alternatives

The model of the new economic mechanism which is being formed in the defense sectors, is also beginning to spread to the sphere of their own military production. According to evidence in BEIJING REVIEW magazine, the spread of commodity-money relationships in the sphere of PLA material and technical support permits the transfer of a part of military production to direct ties with consumers of military production—military units and formations. It is assumed that a portion of military equipment for military units will be purchased or directly ordered at military-industrial enterprises based on their requirements. As the magazine points out, this will allow them to avoid accumulating excess supplies of equipment at military depots and annually save up to 10 million yuan on an army wide scale. It is understood that it is necessary to "take money

into account" even in military production and to think about its profitability and value.

Meanwhile the problem of output effectiveness in civilian production has become the core of military economic policy. As stated in the program of the Ministry of Space Production, it is bad "to give all of oneself to the matter and stubbornly go the the top." Statistics also confirm this. Thus, spot checks of civilian production at 18 Northeast and North China defense enterprises revealed that their losses are not only not falling but are growing after transitioning to new management conditions. The diagnosis: Violation of cost accounting and self-financing principles and low vested interests of workers in increasing the quality of production. This means they need to deepen reform and search for fundamentally new bold paths.

The experience of economic reform in the country also provides an answer to these questions. If leasing of civilian enterprises is widespread in China, why are individual defense enterprises also not being leased? There are also positive results of the experiment with 180 small defense plants in Sichuan Province which have been transferred to a system of local industry. During the last five to six years, all of them were converted to profitable production and their equipment was modernized.

One can also lease "civilian production" of major defense plants. The directors of a number of such plants, as RENMIN RIBAO writes, recently visited a Beijing metallurgical combine and were convinced with their own eyes what internal production cost accounting and lease terms produce in this gigantic industry. The workers, having become leaseholders, propose a mass (over 3,000 in one shop) of suggestions for improving production, product sales, and wages. Those who quit the plant during their hard times have drifted back.

Having manufactured output needed by society and having earned profits, the military-industrial enterprise can do much for its workers. As the director of one of them said, a major or even a medium plant is "a whole city" and practically everything that affects housing construction, education, public health, social services, and cultural and enlightenment work is decided at the plant and at its expense. This is why the slogan "Junmin ji he" "combine the military with the civilian" is understood by almost every Chinese.

### Slowness of Military Mail System

90UM0008B Moscow KRASNAYA ZVEZDA in Russian 29 Sep 89 First Edition p 4

[Interview with Major General E.G. Ostrovskiy, chief of USSR Ministry of Defense Courier Postal Communications Service by Major A. Vorobev, KRASNAYA ZVEZDA correspondent: "Why Are Letters Disappearing?"]

[Text] "Dear Editor, help me figure out where my letters go. We still sometimes receive newspapers but we have no luck with letters—they can be delayed for two to three months. But sometimes they do not arrive at all.

I served in Afghanistan and there mail arrived within three days. Postal service soldiers even found their addressees during the Great Patriotic War. But here you wait months for letters. Why is this so?

Warrant Officer A. Khalan Northern Group of Forces"

This is an ordinary building of a communications enterprise on the outskirts of Moscow. The Central Hub of the USSR Ministry of Defense Courier Postal Communications [Service]. During early morning, special trucks loaded with mail leave from here for an airport near Moscow. Four aircraft deliver mail from it daily throughout the entire group of forces. Just where are the letters held up for so long and also where do they disappear entirely?

I posed these questions to Major General E. Ostrovskiy, chief of USSR Ministry of Defense Courier Postal Communications Service. This is what he said:

[Ostrovskiy] It is quite unfortunate that the complaints against our service are serious and justified. We understand people's indignation when letters take long weeks to get to the group of forces, all the more so if pieces of mail disappear. There are several reasons.

Last year, the FPS service recorded 365,000 envelopes as having arrived in damaged condition from the Ministry of Communications enterprises. There have been 140,000 such letters during the first six months of this year.

It is hard to say how many envelopes addressed to field post offices are lost at the same time, but I think that almost every letter can attract the attention of people with dirty hands.

[Vorobev] Are they really stealing?

[Ostrovskiy] They are stealing them in order to get money. It is a very irrepressible desire of certain parents and relatives of servicemen to send money in the envelope with a letter. In so doing, they are committing illegal activities and worse still they are inciting their children or dear ones to crime since this money can only be used abroad illegally.

It is curious that they are not ashamed to admit it. This if what F. Stepanov writes from Dolgoprudnyy of Moscow Oblast: "...A ten ruble note was placed in the letter. The letter was received but the ten ruble note was gone. I sent my son another ten ruble note on his birthday. I glued postcards [together] and put the money inside. The letter came to my son unglued and the money once again did not turn up..."

Dishonest people also hunt for such "gifts" and frequently destroy the letters in order to cover their tracks. For example, addressees did not find more than 900 letters through the fault of L. Semika, operator of the railway post office in Novosibirsk Oblast. She opened envelopes while searching for money and destroyed the letters.

There are many such "attacks" at field post offices. The Ministry of Communications is taking steps to charge the guilty. But unfortunately, the lovers of other people's

money have still not been deterred. Losses are most often occurring at USSR Ministry of Communications and Ministry of Civil Aviation enterprises, although this is also occurring at our hubs. Particularly during the final stage when the letter is in the hands of a lackadaisical or dishonest soldier-postal worker. Alas, there are also those. Thus Privates V. Yemelyanchuk, S. Grechko, A. Mokeyev, and A. Manuylov were recently convicted by a military tribunal court for opening letters. We think this is a sign that the military collective should select military postmen (this is not an authorized position) so that mail does not end up in the hands of undependable people.

[Vorobev] Eduard Georgiyevich, just how do we change things for the better although we are decreasing losses of postal correspondence?

[Ostrovskiy] I just recently met with Ye. Manyakin, the deputy minister of communications. We agreed on joint measures. For example, we were allocated three letter sorting machines. But of course they are not sufficient to accelerate the disposition of letters since we have reduced echelons for transferring them. In the future, we plan to install the required number of machines which will allow us to stop sending mailed items addressed to field post offices through several Ministry of Communications enterprises and to bypass military district zonal communications hubs. Control over the flow of letters and their safeguarding has also been appropriately toughened. Incidentally, we need to improve the currently existing law which deals with the issue of protecting letters.

In my opinion, we should also toughen the requirements on theft of written correspondence. And in our country opening a letter is not in and of itself a crime. Yes we envision a law that preserves the secrecy of a letter. However there are many examples when individuals who open envelopes are not charged with a crime since it would be hard to prove that they were interested in the contents of a letter.

Right now, we officially permit transmission of small sums of money to the deposit books of soldiers assigned to the group of forces. Why then do we not organize the sale of basic necessities at post exchanges on credit? A soldier should have the opportunity to obtain the Soviet goods he needs at post exchanges. If this happened, I think the need to send money illegally [through the mail] would disappear. Other methods are also possible. But the main thing is that we need to do something to change the situation. Prohibitions are not helping here.

[Vorobev] And how are things concerning packages of printed matter?

[Ostrovskiy] I remember that they were allowed from 1958-1963. But we had to stop doing this because this channel was used for illegally sending money, jewels, and even narcotics. But we can renew this type of service only if the customs service can handle this type of mail. But, according to even the most modest calculations, we would be required to add hundreds of people to the already existing staff at stations and hubs.

[Vorobev] But nonetheless, Eduard Georgiyevich, is there any certainty that in the near future soldiers' letters will be delivered in a timely manner?

[Ostrovskiy] We are applying all our efforts toward that goal. We have already elaborated and are implementing, jointly with the Ministry of Communications, measures which will reliably protect letters from being opened or stolen. And I would like to use this opportunity to appeal to those who are sending these letters: Please comply with the rules for addressing correspondence and do not delay answering so that the field post office is once again accused [of delaying mail deliveries].

### Problems Accommodating Troops Withdrawn from Abroad

90UM0025B Moscow KRASNAYA ZVEZDA in Russian 5 Oct 89 First Edition p 2

[Article by KRASNAYA ZVEZDA correspondent Lt Col V. N. Kovalev: "'Games' Played by Headquarters—Cost to a Unit Undergoing Change of Station"; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] The withdrawal of Soviet troops from friendly countries currently taking place gives rise to a number of problems, which include those associated with refurbishing of new stations. Their resolution and obstacles to normal functioning and training of units at their new locations are the subject of this article by Lieutenant Colonel Valeriy Nikolayevich Kovalev, who is the permanent KRASNAYA ZVEZDA correspondent for the Transbaykal Military District.

It is said that two moves are equivalent to one fire. Who among us as military personnel has not seen the truth of that saying in his own experience? If that is true in the case of a family consisting of three or four persons, what can be said about a complex organization the size of a military unit?

The decision our government made this year has led to the withdrawal of a tank division and a number of other combat arms units from the Mongolian People's Republic and their relocation in the USSR. Several months have passed since their return. What is their present situation, and how do the personnel feel about their new duty stations?

To answer the above questions, I recently spent some time with two PVO units that had returned from Mongolia at the end of May.

How beautiful autumn is in those places! Birch trees growing on low hills were clothed in golden armor. However, unit political worker Lieutenant Colonel G. Gorbachev was not impressed by the colors of autumn.

"We do not have time to enjoy nature," said the political worker. "Winter is not far off, the white flies will start buzzing around, and there is much that remains to be done. There is the boiler room to bring up to operating

condition, then refurbish the barracks, repair the classroom building and soldiers' tea room, etc."

"Gennadiy Semenovich, is it not taking a little too long to get organized? As far as I know, it was not an empty place that you were given. You took over a post that until recently was home to a unit that was inactivated."

"That is true. The place was not empty. As far as getting organized is concerned, let us pay the commander a visit."

What I was to learn in the commander's office led me to view the situation in a somewhat different light.

The unit knew as early as January that it was to return. As soon as the unit's new location in the USSR was announced, what can be described as a quartermaster team was formed. Consisting of 56 men, it was supplied with all the necessities and ordered to report to the new post to prepare the installation for the unit. The "quartermasters" toiled for almost three and a half months. They repaired the classroom building, headquarters, mess hall, vehicle building, maintenance area, more than two-thirds of barracks facilities, bathhouse, storage buildings. At the end of May, Major G. Khilmenko, who was in charge of the team, estimated the amount of work remaining and telephoned the unit: "Everything is ready for your arrival. We will be expecting you!"

However, Grigoriy Spiridonovich was too much of an optimist. Several days after he made his spirited report, the "restored" post was visited by high-ranking officers. They were satisfied with the quality of the repairs. A day later Major Khilmenko was ordered to report with his team to another post to—of all things!—prepare it for a unit. At first he thought that this was some kind of joke. However, we all know that the authorities do not play jokes. As a result, Khilmenko reluctantly led his people to the other post.

Let us digress for a moment so that we can ascertain how something that seemed impossible became possible. The point is that the military posts that were to become the homes of both units from the Mongolian People's Republic were made available by a branch of service, not the district. It was there that the decision was first made, but, for reasons unknown, in the middle of May a "new game was started."

Thus, Khilmenko and his team wound up on another post. What he saw there was discouraging. Half the mess hall roof was missing; the barracks and classroom building were neglected and littered; windows were broken out and electrical wiring damaged. The clubroom was in pitiful condition.

"The impression created in me," explained Major Khilmenko, "was that a typhoon had passed through, breaking and crushing everything in its path. At first I was sorely depressed. To think that we were faced with another repair, and what a repair at that! And here we were without construction materials and money."

Only 2 weeks remained until the unit would arrive, and not much could be done, of course. We were forced to work on the main refurbishing jobs as the unit was moving in; we put all available forces to work. In no time we collided with the materials problem. What assistance the billeting directorate rendered was minor, and even that required the intervention of the commander. The matter was made more difficult by the absence of funds. The district finance service was in no hurry to provide them, citing existing regulations. Incidentally, a number of regulations prevent fund disbursement even now. In a word, they did their best not to provide help. Things deteriorated to such a point that we literally passed a hat among the officers, asking them to give as much as they could for construction materials, so that we would not be forced to spend the winter in the streets. So they "threw in" amounts of 100 and 200 rubles. The authorities still cannot return the money for reasons unknown.

Indeed, a real detective story could be written about how the repair necessities were and are being gathered. Nevertheless, in spite of all the obstacles, the post is starting to function normally. Repairs on the barracks are nearly completed. The clubroom, mess hall, post office, and shower are in use; the headquarters and storage buildings repaired; and the guard facility equipped. Combat equipment has been serviced and placed into storage. But the cost of all this was enormous! For four months everyone—from the commander to the lowest-ranking soldier—labored from dawn to dusk. For 4 months the unit has not undergone combat training. Such an extended interruption in training will leave its mark, even on trained specialists, of course. The interruption still exists, since refurbishing work is still in progress; the classroom building has yet to be restored.

A high price is paid by units as a result of narrow departmental interests of those in charge of the posts.

A number of other difficult problems has arisen at the new location. Officers and warrant officers returning to the USSR have brought their families with them. However, many families have nowhere to live. The unit was allotted only a third of the required number of apartments, even though empty apartments were available in the living quarters area. The departmental barrier once more came to the surface. To break through it, people resorted to sending telegrams to the Presidium of the Congress of People's Deputies. Apartments were assigned, thus obviating the need to build new housing. A person cannot help but ask himself: Why was the problem not resolved immediately, since living quarters were available on post?

Incidentally, narrow departmental interests still exist. The following is an example. The housing directorate that services the quarters for the families of officers and warrant officers returning from Mongolia also does not have a particular liking for "strangers." It knows how to collect the rent, but does not provide specialists and materials to repair the houses and apartments. At times this reaches the point of absurdity. Lieutenant Colonel Gorbachev related to me the story of what happened to his apartment.

Workmen arrived there and started to paint the walls and ceilings. Suddenly they stopped working and disappeared. It appeared that they had reported to the wrong address; they were supposed to repair another apartment, one of their "own."

The problem of organizing a kindergarten also ran into bureaucratic horns. Since the post kindergarten was filled up to capacity, unit authorities decided to set up one of their own, making available a three-room apartment. They selected the personnel and secured support from Soviet Army civilian A. Shatokhina, a representative of the district medical service. The families were notified that the kindergarten would accept 30 to 35 children at the end of August. However, Alla Grigoryevna Shatokhina either fell ill or went away on leave, thus bringing the matter to a standstill.

Unit political section workers suffered a trying experience attempting to transfer their subscriptions to periodical publications. It was all they could do to arrange for newspapers to be delivered. However, officers and warrant officers are still not receiving magazines and literary supplements to the magazines. Attempts to locate the hold up have been fruitless.

Nevertheless, with all these minuses, the present situation in that unit cannot be called hopeless. In spite of everything, the most difficult part of becoming reestablished has been accomplished. The situation is much worse in the other unit withdrawn from the MPR. Its people have been forced to take a greater sip from the bitter cup with the label of "departmental interests." They and all their equipment were transferred twice since their withdrawal. They were able to "drop anchor" only on the third try. Three times they loaded up their equipment and furniture. I saw their tables, cabinets, chairs, stools, and stands. At least half the items must either be repaired or discarded.

For a long time people had no choice but to live in tents. It was only recently that they were able to move into barracks, even though everything was not ready there. Repair work on the clubroom has come to a halt due to lack of materials. The bathhouse was repaired but cannot be used, since a wall collapsed. Especially disturbing is the problem of heat supply to the mess hall and living quarters. Of the three boilers in the boiler room, one is inoperative due to a broken heat system caused by corrosion that has eaten through the pipes in several places, necessitating replacement. As we all know, winter in the Transbaykal is not a joke.

However, the main problem has to do with the combat materiel. The equipment area has not yet been cleared. The former users of the yard have been given deadlines on three occasions, and three times they failed to meet them.

I visited the yard, if that is what it can be called. Space is limited on that field; the vehicles abut against each other. If something were to happen, it is unlikely that they could

be moved out rapidly. It should be understood that servicing the complex materiel would be an impossible task. As a result, one can only guess at its condition after the march and the four-month "rest." How much time will pass before the equipment area will be completely cleared? No one would dare attempt to give a definite answer to this question.

I have discussed only the most vital problems encountered by authorities of the two units at their new locations. I could add a dozen so-called details. By the way, can one consider as a "detail" for example, the fact that in both units, after four months, there are still officers awaiting orders for reassignment or discharge into the reserve? And what about the annoying game being played with the table of organization mentioned to me by officer V. Shevchenko. In Mongolia, a personnel list was provided before the withdrawal, but another list was issued in June. All these "details" affect people—their mood, morale, and, finally, their attitude toward work and the service.

It is a fact that withdrawal of our troops from abroad will continue. Therefore, there is a need for new stations for a number of units. Great importance attaches to most careful analysis of the costs and errors that are encountered in accommodating the first units and reaching the necessary conclusions.

#### **Conversion: Cruise Missile Plant Producing Chocolate**

90UM0023A Moscow SOVETSKAYA ROSSIYA in Russian 5 Oct 89 First Edition p 2

[Article by unnamed TASS correspondent: "Chocolate Instead of Missiles"]

[Text] A production line developed by specialists of the experimental Machinebuilding Plant imeni M. I. Kalinin, which is a part of the Sverdlovsk NPO [Scientific Production Association], is capable of producing 3 kilograms of chocolate a minute. This enterprise is changing its production from launchers for cruise missiles to non-military items.

It started off by working on an order for a line capable of producing chocolate truffles. The order was submitted by the local confectionery industry association that has set out to organize new production processes. The former defense plant, in collaboration with city enterprises, fabricated and assembled a 25-component automatic production line. This kind of responsiveness is made possible by the availability of highly-qualified specialists and laborers. They utilized the experience gained in creating assemblies employed in military equipment and existing scientific concepts. In addition, the designers and manufacturing engineers learned the technical aspects of an area that is new to them and developed ways to improve the equipment that will be used by the food producers. This resulted in their producing the high-output machinery.

The association is presently engaged in developing automatic units for use by a city meat combine and vegetable-processing enterprises.

### Baltic Military District Trades Abroad

18010009 Moscow KRASNAYA ZVEZDA in Russian  
10 Oct 89 First Edition p 4

[TASS Correspondent B. Sebyakin: "Voyentorg is Earning Cash".]

[Text] Apples, perfume and other goods from Poland have been appearing on the counters of Voyentorg [Military Trade] stores in the Baltic Military District. The imported goods are received via a non-currency exchange of unsold textiles and garden products of a total value of a half million rubles.

To develop its foreign ties the Trade Directorate of the Baltic MD created a foreign trade firm, "Interbaltik". For a short time talks were conducted with a series of firms from the FRG, Italy, Sweden, Finland and the USA.

The Western partners are being attracted by the current world fashion appeal of Soviet labels, including military ones. The American firm, "Elegant Logic", for example, is eager to purchase obsolete military articles which have been taken out of production. Aside from this, foreign businessmen are interested in scrap metal of which there is an excess in any garrison.

For the currency received as a result of the mutually beneficial deals Voyentorg plans to acquire trade-technological equipment which is not currently available in our stores.

### Conversion: Profit Declines at Leningrad Plant

90UM0039A Moscow TRUD in Russian 12 Oct 89 p 2

[Article by Ye. Druzhinina: "At the 'Secret' Plant"]

[Text] The "beating of swords into ploughshares" has begun in the nation's defense industry on a massive scale. As we know, this process is called conversion. In the Leningrad association "Plant imeni M. I. Kalinin", conversion is being materialized into objects that are clearly in short supply in our homes at present.

I never did find out what the basic product of the association is, even in general terms. Except for the abstract term "article," the people I talked to said not a word about it. But the chief economist of the association, B. Borkovkin, and the chief designer of the department of consumer wares, A. Sergeyev, talked about everything that has to do with the manufacture of civilian products. And they demonstrated them with evident satisfaction.

I was sat down in the center of a special acoustic room and for a start they demonstrated the "star" of conversion—the "Statik" stereo sound reproduction unit. They turned on the player, and a powerful, pure chorus floated down from the tall flat speakers and walls of the room. This was truly high-quality sound.

"Now we will turn on an English unit, made by the 'Quote' company, for comparison," said Aleksandr Sergeyev.

I compared the sound. It was clear even to a dilettante that the quality of the sound from the domestic unit was higher than from the English. As I learned, specialists from Poland and the FRG who were shown the "Statik" had reached the same opinion. Such acoustic units, reproducing the sound from any receiver practically without distortion, are made only in a few highly-developed countries. And it appears that the demand for them is very high. I was told that according to the popularity index of technical consumer items, units creating high-quality musical sound in the home held third place. While, for instance, video equipment remains at the bottom of the second ten. Presently in our country the picture is generally the opposite, but it cannot be ruled out that within a few years the "Statik" will also be a necessity in each of our homes.

Incidentally, it is no accident that the English units cost 2,200 dollars, while our speaker costs only 250 rubles. That is how far we are out of step with world prices—was B. Borkovkin's comment on the situation.

The "musical" subject matter of the consumer products was continued in the association with the manufacture of the "Kvazar" cassette tape recorder, player, and the "Forum" low-frequency amplifier. The "Forum" is suitable for any domestic or imported sound-reproduction equipment.

And here is another novelty that should interest car enthusiasts.

Aleksandr Georgiyevich demonstrated a small, quite elegant case containing a portable "Temp-1" compressor for pumping tires. This is a design of association specialists. The compressor costs 39 rubles and has already been patented in eight countries.

Nor have they forgotten humanity's better half. For some years now there has been no problem finding electric curling irons in Leningrad stores. Now the model has been improved. But while there is no shortage of irons, the "Stezhok" miniature manual sewing machine, costing just 11 rubles, is immediately gathering queues in those stores where it appears.

There were plans to produce these and other consumer items this year worth 35 and a half million rubles. But the plan has already been exceeded by almost a million. The growth in volume for next year is expected to be double.

"Life itself is impelling these conversion rates," says the chief engineer of the association, A. Zakharov. "In order to maintain smoothly operating production, we have to seriously prepare for the transition to 'peacetime' channels."

What difficulties has the "Plant imeni M. I. Kalinin" encountered in the transitional period?

"Of course conversion does not proceed without pain to the collective," recounts Boris Borkovkin. Because of the mass production of very cheap consumer products instead of the expensive "articles," the enterprise's profit is dropping. This year it fell by near 15 percent. In order that

defense-industry enterprises not be "left behind," for the time being our losses are compensated from the state budget. It is expected that we will balance income and outlays independently in the future.

Another problem. As you know, the high demands made on the "articles" created a backbone of highly professional workers and engineers in this sector. But their work was encouraged by specific benefits. Now these specialists have been forced to switch to making civilian products. We will probably have to keep giving them all the benefits in order to maintain a capable collective, and by so doing raise the prestige of consumer product manufacturing. This question is now being considered in the GOSKOMTRUD [State Labor Committee].

We will increase the volume of civilian production without losing sight of its qualitative level. The fact is that, in our opinion, the market will be flooded with industrial products very soon, even though this might be hard to believe now when you look at the empty shelves. Nevertheless, it will happen, and we must prepare for competition with other manufacturers of the same tape recorders and players.

But how can we resolve prospective problems if we do not succeed in concluding contracts for next year's shipments of component parts? For example, the Novgorod association "Kompleks" is not taking orders for transformers which no one else in the country produces any more. The transformers are needed to produce apartment security devices. The "Kopir" plant of Kozmodemyansk does not want to supply electrical outlets for the players, and we have plans in the association to produce 100 thousand of them next year. Our Leningrad "Pozitron" is also letting us down.

But despite the difficulties, the association "Plant imeni M. I. Kalinin" is most resolutely intent on conversion. We have opened up our own company store. For the present it is not all that rich; products are not accumulating on the shelves. But as early as next year new products will be appearing there; preparation for their production is just

concluding in the association. These include new stereophonic cassette tape recorders and a pneumo-hydraulic automobile jack...

And one other direction has been chosen in the association: medical instruments. Among the first developments is an instrument for measuring arterial pressure, and others.

I want to believe that conversion truly will result in beautiful items that people need. After all, we know how to make the most complex weapons. Could sewing machines really be more difficult?...

#### Conversion of Omsk Defense Plants Noted

18010014 Moscow SOTSIALISTICHESKAYA  
INDUSTRIYA in Russian 31 Oct 89 p 2

[Article by E. Chernyshev: "The Course of Conversion"]

[Text] A partial conversion of military production is currently going on at the defense enterprises in Omsk. Already 35 types of consumer goods have been produced. These include washing machines, vacuum cleaners, and equipment and machinery for agriculture, and for the light, food, processing and shoemaking industries.

The transport machine building plant association, for example, is producing lines for packaging potatoes, transport equipment, and automatic dishwashers. The Baranov production association is beginning production of equipment for shoemaking.

The Polet production association has begun series production of the "Sibir-6" washing machine. Using the opportunities which conversion has given it, the plant has established a business relationship with a French firm and has decided to organize joint production of automatic washing machines, superior to similar products on the world market. The plant for hoisting machines is developing technological documentation for the output of passenger elevators, which are in great demand for housing construction. The Elektromekhanicheskiy Plant association is currently producing stereo equipment.

**Critique of MSU Zakharov's Memoirs**

90UM0028A Moscow KRASNAYA ZVEZDA in Russian  
06 Oct 89 First Edition p 4

[Article by Colonel V. Danilov, candidate of historical sciences, under the rubric "Viewpoint": "According to the Old Plan"]

[Text] This year the USSR Ministry of Defense Military Publishing House, a Recipient of the Order of the Red Banner for Labor, published the memoirs of Marshal of the Soviet Union M. V. Zakharov, entitled "The General Staff During the Prewar Years". Some previously "restricted areas", concerning the formation of the General Staff as the strategic command and control agency and its activities in safeguarding the country's defense interests, were elucidated in them.

Of course, every author has his own vision of the world and his own manner of conveying it to the reader. But, as I see it, a sense of responsibility and allegiance to historical truth is very important when elucidating the problems of defense organizational development and the work of the highest organs of military leadership.

In our time, the question of I. Stalin's and K. Voroshilov's role in defense organizational development is being sharply debated. The Party documents and the press have repeatedly remarked that while remaining within the framework of historical truth, we should be aware of their unquestionable contribution to the country's defense, as well as their gross blunders and arbitrariness, for which the Soviet people and its army paid a great price. History's judgment has taken place. It has passed a definitive sentence on the gross miscalculations in determining the dates of the Fascist aggression, the strategic military capabilities of the Soviet Armed Forces on the eve of the war, the axes of the main attacks, and also the strength and might of the groups of forces created by the Germans.

Memoirs have presented the activities of these leaders in a rosy light. Stalin foresaw everything and thoroughly scrutinized everything. It was he who examined the thesis concerning the duties of the General Staff, participated in the elaboration of the problems of the force development process in the Soviet Army, appeared before an expanded session of the Main Military Council of the Workers' and Peasants' Red Army (RKKA), where he fought for considerate treatment of military personnel, and put forward practical proposals for the refinement of the USSR's defense plan. On the whole, everything was proceeding smoothly. True, reproach was also cast upon the leader—he ignored Marshal B. Shaposhnikov's opinion regarding the abilities of the Finnish Army.

"The Iron People's Commissar" appears as a toiler, a military expert, and a concerned and affable military leader. The author fondly recalls: "On 15 July 1937, I was urgently summoned to K. Ye. Voroshilov, the People's Commissar for Defense... His (Stalin's) hearty welcome and calm conversation soon dispelled all my troubled thoughts". And this meeting with the People's Commissar took place only a month after the execution of the first group of

prominent military leaders and while the next wave of bloody repressions was sweeping across the country...

Theses, which have been refuted in the course of perestroika, on the scientific validity of certain strategic military concepts, developed by the General Staff on the eve of the war, are once again being repeated in memoirs. Here is an example. While analyzing operations at the onset of World War II at a military conference on 31 December 1940, Marshal S. Timoshenko, the People's Commissar for Defense, stated: "In the sense of strategic creativity the experience of the war in Europe, perhaps, does not offer anything new". This thesis is deemed to be among those that were "absolutely correct" in M. V. Zakharov's memoirs.

In reality, this was a profoundly erroneous theoretical generalization, which entailed substantial miscalculations in the practice of defense organizational development and in the planning and training for operations in the initial phase of the war. We prepared to begin and wage the war according to the old plan—with frontier battles by an invasion army and a covering army. Materiel was concentrated not far from the combat troops and, consequently, fell opportunely under the direct control of the enemy. The General Staff intended to control the fighting forces in the field from regular peacetime workplaces with organic communication facilities (by using the government communications network). When we finally came to a conclusion on the necessity of having command posts—valuable time had already been lost. And how does the author of the memoirs assess these and other miscalculations? He asserts—"Analysis of numerous documents indicates that the proposals and plans which were submitted by the General Staff to the All-Union Bolshevik Communist Party Central Committee and to the Soviet government were well-reasoned and sound". It seems that war veterans after reading this statement, will think: "If everything was so correct, why did we fall back to Moscow?"

And one last thing, Marshal Zakharov had firsthand knowledge of the repressions taking place in the country and in the Army. Marshals of the Soviet Union M. Tukhachevskiy and A. Yegorov, former chiefs of the General Staff were victims of them. General of the Army K. Meretskov passed through the hell of torture chambers. V. Levichev and S. Mezheninov, deputy chiefs of the General Staff, Ya. Smushkevich, assistant chief of the General Staff, and many other of his fellow Marshals were executed. But the author of the memoirs expressed his attitude toward this tragedy only with the sufficiently vague phrase: "The times, when I worked on the central administrative staff of People's Commissariat for Defense, were troubled times both for the army and for the country as a whole".

That's it. There isn't anything more.

The author of the memoirs is dead now. But, as I see it, the publishers did not make the most of all the possibilities for objective interpretation of the memoirs. This would have filled in the gaps in a book, which, indisputably, contains much that is interesting and instructive for everyone who is interested in the heroic history of the Soviet Armed Forces and their General Staff.

### Technical Specifications of Western SAMs

90UM0014A Moscow VOYENNYE ZNANIYA in Russian No 7, Jul 89 (signed to press 6 Jun 89) p 29

[Response to letter to the editor by Col Ye. Klimovich, candidate of technical sciences: "Portable Anti-Aircraft Missile Systems"]

[Text] Dear Editor! What portable anti-aircraft missile systems are in the inventory of NATO armies?

V. Cherkes, agronomist, Bendery

A. Rozenberg from Kurgan, V. Polyakov from Kokchetav Oblast, and other readers of VOYENNYE ZNANIYA ask this same question.

Col Ye. Klimovich, candidate of technical sciences, answers this question. (According to foreign press materials.)

Currently, the NATO armies have the following portable anti-aircraft missile systems in their inventories: Redeye and Stinger (U.S.), Blowpipe and Javelin (Great Britain), Mistral (France). See the table below for the basic specifications and performance characteristics.

Characteristics of Portable Anti-Aircraft Missile Systems

Characteristics	Redeye	Stinger	Blowpipe	Javelin	Mistral
Impact zone (km):					
range	0.5-3.6	0.3-4.8	0.3-3.0	0.3-5.0	0.5-6.0
altitude	up to 2.5	up to 3.0	up to 2.0	up to 2.0	up to 3.0
Dimensions:					
length (m)	1.22	1.4	1.35	1.4	1.8
missile diameter (mm)	70	70	76	76	90
Weight of elements (kg):					
total	13.1	15.1	21.3	24.1	17.0
missile	8.2	10	11	-	3.0
warhead	1	1	2.2	-	-
Maximum speed (m/sec):					
missile	600	700	500	-	about 900
target to be hit	230	340	220	-	420

The Redeye system is designed for destroying low-flying air targets in good visibility. It is fired only in the rear-quadrant and does not have an IFF system. It includes the launcher (tube) with an optical telescopic sight and the missile with passive IR-homing. All components and devices needed for launching the missile are located inside the launch tube and not on it. The missile is launched from the shoulder of the operator, who, after visually detecting the target and determining its nationality, aims the optical sight at the airplane or helicopter. The sight has sighting lines for calculating the lead. As soon as the thermal-emission receiver on the missile homing head begins to pick up infrared radiation from the target, audio and visual indicators are activated. The operator also visually determines when the target enters the launch zone.

The Stinger system has been developed to replace the Redeye anti-aircraft missile system in the United States. This missile has a better propulsion system and a new IR-homing head, making it possible to fire at air targets flying in any direction. The system is equipped with an IFF system for identifying the nationality of airplanes and helicopters. The shipping-launching canister in which the missile is located is made of fiberglass. The canister has covers on both ends which disintegrate when the missile is launched. The front cover is made of an IR-translucent material.

Recently, there were reports in the foreign press that a new two-band seeker operating in the infra-red and ultrasonic bands is being produced for the Stinger. In the opinion of foreign experts, this seeker increases the Stinger's protection against jamming, since it makes it possible to use it when the enemy employs IR-countermeasures.

The Blowpipe portable anti-aircraft missile system makes it possible to destroy low-flying air targets in the forward and rear quadrants. It can also be fired at ground and surface targets at a range of up to 3000 meters. The system consists of the missile, a sealed canister (launch tube), and aiming unit attached to the launch tube. The high-explosive fragmentation warhead is located in the middle of the missile and is equipped with contact and proximity fuzes. The aiming unit includes a monocular sight, a launch program device, an IFF, a controller, and an automatic device for gathering the missile into the line of sight. Foreign experts include among its shortcomings the lack of an all-weather capability, limited capability for combating maneuvering and high-speed targets, and low protection against jamming.

The Javelin portable anti-aircraft missile system (replacing the Blowpipe) is intended for combating low-flying airplanes and helicopters in the front and rear quadrants. Thanks to the main solid-propellant rocket motor with a higher impulse, the missile has a maximum slant range of

up to 4 km, and up to 6 km against hovering helicopters. The sight magnification has been increased to X6. Unlike the Blowpipe missile system, which uses the manual method of guiding the missile to the target (the operator tracks the target and the missile simultaneously using an optical guidance unit), the Javelin system has a semi-active radio-command guidance system. The operator only has to keep the air target in the optical sight, while tracking of the missile, measurement of its deviation from the line of sight, and generation of commands to be transmitted to the missile are done automatically (a computer determines the error between the lines of sight to the target and to the missile). The Javelin is equipped with an IFF target identification system. The missile's high-explosive fragmentation warhead is detonated by proximity or contact fuzes.

The French Mistral portable anti-aircraft missile system is capable of destroying aircraft flying at speeds up to 1500 km/h, at altitudes up to 3000 meters, and at ranges of 0.5-0.6 km. Its missile is located in a sealed canister used as a carrying case and launcher. The missile is equipped with an IR-seeker, an electronic guidance system, electric servomotors to control the fins, a thermal battery, ejection and sustainer motors, and a self-destruction device.

The seeker is able to lock-on to and track thermal radiation created by the engine of a jet aircraft at a distance of over 6 km. It can do this at a range of more than 4 km (in forward quadrant) against a light helicopter equipped with a thermal emission reduction device. The seeker uses a mosaic receiver using indium arsenide, which considerably increases the possibility of detection and lock-on of targets with reduced IR-emission. It also makes it possible to distinguish between valid and false signals (sun, brightly illuminated clouds, decoy flares, etc.). The missile's high-explosive fragmentation warhead contains ball-shaped tungsten submunitions and contact and laser proximity fuzes. The launch motor is discarded at a safe distance from the operator (about 15 meters); the sustainer motor tells the missile to go at maximum speed of Mach 2.6. Because of this, the missile can hit a helicopter hovering at a distance of 4 km from the launch location in 6 seconds, which not only prevents the helicopter from using its weapons, but also from taking cover behind natural terrain irregularities.

The operator uses a tripod with a seat assembly for ease of guiding and launching the Mistral missile.

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#### Future Development of Combat Helicopters

90UM0010A Moscow KRYLYA RODINY in Russian  
No 9, Sep 89 (signed to press 16 Aug 89) pp 26-27

[Article, published under the heading "Innovations of Foreign Aviation Equipment," by V. Viktorov, engineer: "Helicopters From the Beginning of the 21st Century"]

[Text] Aviation specialists from a number of nations, particularly the United States and Western Europe,

having intensified research on the problems of developing military helicopters which should go into service in the 1990s and in essence become the main helicopters at the beginning of the next century. Here particular attention has been given to the development of light multipurpose, in particular, combat and reconnaissance helicopters. By 1980, the United States had worked out the idea of an Air/Land Battle: 2000. This viewed all possible versions of conducting combat on land and in the air and in particular detail, the role of helicopters in this. According to this concept, helicopters should help in conducting combat under any weather and climatic conditions, at night and during the day, in mountains and over the sea. Here it was planned that the helicopters would have significant range, high survivability and resistance to the effect of weapons of mass destruction.

However, the helicopters delivered to the U.S. Army, as the journal ARMED FORCES JOURNAL asserted, did not fully meet the demands of the elaborated concept. For this reason, the question was posed of developing helicopters with fundamentally new combat qualities.

What should these be?

During these years, the army began to replace the in-service numerous Bell UH-1 helicopters with the more advanced Sikorsky UH-60A and the units were preparing for the delivery of the advanced AH-64A. The supplier firms were modernizing the other types of helicopters.

In accord with the concept of the Air-Land Battle: 2000, the Pentagon decided generally to "put order" in the entire helicopter fleet. The problem was that at the beginning of the 1980s, there were several thousand light helicopters of 13 types, including the combat AH-1, the reconnaissance OH-58 and OH-6, and the multipurpose UH-1. According to the assertion of the journal HELICOPTER INTERNATIONAL, the command considered it essential by the year 2000 to have only five types of helicopters in service and after the year 2010, just two. One of these two types would be the reconnaissance, advanced helicopter OH-58D and the other would be a new generation of helicopter, the LHX.

Thus, the LHX Program was organized. In truth, after the 1980s, it is to be repeatedly revised. Initially, they planned to purchase 4,000-5,000 helicopters in the following versions: the multipurpose LHX-UTIL and the reconnaissance-combat LHX-SCAT. But the cost of such a program (\$66 billion) seemed too great to Congress. It was a matter of abandoning the multipurpose model and, keeping within the allocation limits of \$33 billion, reduce the number of helicopters to 2,070. But on the other hand, very rigid demands were placed on their designers. The lift-off weight of the helicopter was limited to 4,500-5,000 kg, cruising speed was to be not lower than 315 km an hour, the propulsion unit would be two gas turbine engines with a power of 1,200 hp each. The armament would include a built-in cannon on a turret mounting as well as various types of air-to-ground (up to 6-8) and air-to-air (2) missiles.

Involved in the development of the LHX helicopter were two groups of firms: Sikorsky—Boeing Helicopter and McDonnell-Douglas—Bell. Each of the groups proposed its own version of the future prospective helicopter.

The press has provided more detailed information on the LHX of the Sikorsky—Boeing helicopter group. According to an announcement in AIR ET COSMOS, their helicopter employs a single-rotor scheme with a four-blade main rotor 12.5 m in diameter. In the V-shaped tail unit in a ring duct there is a multiblade tail rotor of the "fenestron" type used on several French helicopters. The firms plan to equip the helicopter with two T800 gas turbine engines.

The crew cockpit is two-seat. The armament should consist of a turret-mounted cannon under the fuselage nose and eight antitank Hellfire guided missiles. Four of these will be located in fuselage bays and the remainder on an external suspension mounting. Also on an external suspension will be two stinger air-to-air missiles. The calculated cruising speed of the helicopter is 310-315 km an hour.

The Bell and McDonnell-Douglas firms are also developing a two-seat helicopter with a four-blade main rotor. But for steering, the designers intend to employ the so-called NOTAR concept in which instead of a tail rotor they employ the release of a flow of air from the engine compressor through a deflector system on the end of the helicopter's tail beam. Such a program has already undergone a flight-test program. All the armament of the helicopter will be housed inside thickened side fairings which also play the role of a small wing.

In December 1990, the Pentagon is to determine that group of firms which over a period of 5 1/2 years should carry out full-scale development of the LHX helicopter. For this the group will be given \$2.5 billion. According to a newly approved schedule, the first flight of the experimental helicopter has been set for August 1993. In March 1996, deliveries to the army should commence so that at the end of 1996 the first combat subunits of LHX helicopters will be organized.

In accord with the new views, the LHX Program has been completely reoriented on the development of just the reconnaissance-combat helicopters, the LHX-SCAT. It has been pointed out that the airframe is to be built almost completely from composite materials (CM). The development of the methods for manufacturing the airframe parts from the CM was tested out under the ACAP Research Program which involved the Bell and Sikorsky firms, each of which built a single experimental helicopter. The radio navigation gear of the LHX helicopter should include digital electronic devices and display systems. For developing the hardware, the ARTI Program was carried out and this involved the American helicopter construction firms and the electronics IBM.

In the course of carrying out the LHX Program, testing was conducted on the demonstration helicopters and the experimental fiber optics control systems were tested. The elements of air combat techniques were worked out

employing the Bell AH-1S combat helicopters, the McDonnell-Douglas 530MD reconnaissance helicopters and the Sikorsky UH-60A multipurpose helicopters.

An important place in all the work of developing the LHX has been assigned to ensuring low visibility of the new aircraft. The journal of the U.S. military-industrial circles U.S. NEWS AND WORLD REPORT in an article published at the end of 1988 particularly emphasized that since the LHX-SCAT helicopter should operate against armored units, it was essential to achieve maximum covertness by employing "stealth" equipment. The modern OH-58 and OH-6 reconnaissance helicopters equipped with above-hub servo systems can conduct a search, taking cover behind natural obstacles. For this reason, chief attention now should be paid to reducing the thermal emission and noise level. Reducing the temperature of the engine gases can be achieved by employing the Black Hole system which has been employed on the AH-64 combat helicopters and requires further development. The tail rotor is the noisiest on a helicopter. For this reason, the NOTAR system proposed by the McDonnell-Douglas firm can help solve this problem.

In the United States for a long time there have been disputes over the size and composition of the LHX crew. At NASA, where they have established a special subdivision for assessing the human factor, research was conducted on the interaction of the pilot-helicopter system, the physical and psychological performance of the crew and its compatibility with the cockpit equipment (ergonomics). Considering the results of this research, the firms developing the LHX have favored a two-man crew.

It is very probable that the Western European nations will be directly or indirectly involved in the LHX Program, as they are developing the light combat helicopter PAH-2/HAP. The journal JANE'S DEFENSE WEEKLY has announced that the representatives of the Italian Ministry of Defense were trying to establish contact with the Pentagon on the question of collaboration in the LHX Program. In truth, the American side for now has not provided a positive response. But for the flight testing of the T800 engine being designed for the LHX, the American firms Garret and Allison have chosen the Italian combat helicopter Augusta A.129.

In the process of implementing the program for developing the LHX helicopter, its initiators and executors have encountered major technical difficulties. They still have not resolved many questions related to the aerodynamics of the helicopter, to the electronic and navigation equipment, the propulsion unit and so forth. But the Pentagon leadership, in accord with the concept of an Air/Land Battle: 2000 feels that this program is most important and is working steadily to realize it.

The reduced number of types of helicopters in the overall helicopter fleet, in the opinion of specialists from the defense agency, will make it possible in the future to successfully carry out the tasks, as the training of personnel, the preparation of the entire system of daily

operation and maintenance of the helicopter fleet in combat readiness will be simplified.

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### **'Militaristic Traditions': NATO's Autumn Forge-89 Exercise**

90UM0016A Moscow KRASNAYA ZVEZDA in Russian  
30 Sep 89 First Edition p 5

[Article by Col L. Levadov: "The 15th Variant of War: NATO's Devotion to Militaristic Traditions"]

[Text] The fall period is traditionally the peak of combat training activities of NATO staffs and troops. From September through November each year, the territory of the NATO countries is turned into a huge training area. There, as well as in adjacent waters of the Atlantic, 20-30 large combined-arms, air, and sea exercises are conducted practically simultaneously, involving hundreds of thousands of service members of all nations of the bloc, including France and Italy, who officially are not part of the military organization of NATO.

All fall exercises of the bloc's combined armed forces in Europe have a common scenario and take place under the single leadership of their supreme high commander. The scenario of this grandiose-scale militaristic spectacle, called Autumn Forge, remains virtually unchanged from year to year.

When the exercise kicks off, the initial situation is disseminated to the staffs and troops involved. It reflects a hypothetical situation in Europe that supposedly leads to war between NATO and the Warsaw Pact. Needless to say, the role of the aggressor is given to the socialist countries.

With such a training model, the staffs and troops work out realistic plans of their actions during the threatening period and during the war. A series of interrelated measures within the framework of subunits, units, large units, and sometimes even large strategic formations are checked. They carefully organize cooperation between armed services, troops of different nations, and civilian and military agencies. Fragments of real actions combined with playing out of a number of measures on maps create a sufficiently complete picture of the strategic deployment of the bloc's armed forces and their conduct of initial operations in the theaters of military operations [TVD] and individual operational sectors. NATO military experts believe that such a comprehensive organization of operational training of staffs and combat training of troops during the fall period creates the best opportunities for training commanders of all levels in command and control of subordinate large units and units, and makes it possible to coordinate all operation plans and check them for viability.

Thus, for 15 years in a row now, beginning in 1975, the NATO military leadership has been rehearsing variants of unleashing and waging war against the Warsaw Pact states. Even though all these variants are fundamentally similar, certain changes are made each time to the scenario,

pertaining to the methods of achieving military-strategic goals or methods of training the staffs and troops that are playing. Thus, the Autumn Forge maneuvers in the 1970s involved the theory of limited nuclear war in Europe; in the 1980s, they studied the possibility of achieving success in war by using only conventional weapons and made attempts to implement the concepts of air-land operation and combating follow-on forces.

What is new in the fall maneuvers of 1989? First of all, as official representatives of NATO proudly emphasize, it is the reduction in the total number of participants, compared with the previous year, from 250,000 to 205,000. It is explained that NATO took this step under the influence of West European public, concerned about the damage the bloc's maneuvers cause the environment. To be totally accurate, however, the greatest protests came over the large-scale operations by combat aviation, particularly at low altitudes, and the more frequent aircraft accidents. Nevertheless, the scope of the exercises of the bloc's combined air forces remains at the level of previous years.

There was a certain reduction in the number of participants in land maneuvers due to the postponement of the traditional American Reforger exercise to January 1990—the annual training for airlifting "dual-basing" troops to Europe. This is what NATO calls the large units and units intended for emergency reinforcement of offensive force groupings in Central Europe. In peacetime, they are stationed in the continental United States, but a second set of weapons and combat equipment is maintained at depots and bases located in the FRG, Belgium, the Netherlands, and Luxembourg. This fall, questions concerning the strategic airlifts across the Atlantic will be worked on by the command-post method, that is, involving only command and control bodies of the units being airlifted. This CPX [command post exercise] will be preparation for the full-scale Reforger planned for the winter period, which is to involve at least 80,000 participants, according to official U.S. data.

So, the slight reduction in the number of participants in the fall maneuvers will be more than made up for by the increase in the scope of the winter maneuvers.

In the opinion of Western military observers, a characteristic distinction of NATO's fall exercises this year is the wide use of electronic equipment in training the staffs, making it possible to simulate any situation and evaluate their decisions. It is believed that the widespread introduction of these devices will result in a qualitative restructuring of the entire system of operational training of staffs and troops in NATO, the new structure of which is now being developed. According to one of the variants, CPXs with widespread use of electronic combat situation simulators will become the main form of operational training at all levels from division and up. Exercises with actual troop participation are to be limited to brigade-scale exercises.

Autumn Forge-89 gradually encompasses the territory and airspace of all European NATO countries and also the adjacent water areas. By now, issues of strategic deployment of the bloc's combined armed forces have been

worked out everywhere, and their forward groupings have begun playing out the initial operations. According to the concept of the exercises, "combat operations" are conducted until the end of September using only conventional weapons.

Subsequently, as was also the case in past years, it is planned to rehearse the escalation of conventional war into nuclear war. This is to become the main content of the strategic CPX, with which the bloc's fall maneuvers are to conclude in early November. In strict secrecy, the NATO staffs will check the next variant of the plans for delivering nuclear strikes against troops and installations on the territory of Warsaw Pact states. Reliance on nuclear deterrence and a transition to using nuclear weapons first still remain the cornerstone of NATO's coalition military policy.

How realistic are the Autumn Forge maneuvers?

During the Bar Frost-89 exercise in Northern Norway, staffs and troops of the United States, Great Britain, the Netherlands, and Norway train for preparing to conduct amphibious landing and anti-amphibious operations under polar conditions. Simultaneously, a number of local air and naval exercises are conducted in the Norwegian, North, and Baltic seas to practice missions for air defense, providing support to ground forces on the shore, and maintaining favorable operating conditions at sea.

The largest operational measures in the Central European TVD in September were the FRG's I Army Corps exercise Offenes Visier, the U.S. V Army Corps exercise Caravan Guard, the French I Army Corps exercise Extel-1 and the French Rapid Deployment Force exercise Extel-2, the British I Army Corps exercise Plain Sailing, and the combine air forces exercise Cold Fire. In all, there were about 130,000 personnel out in the field and up to 1,000

combat aircraft involved in "air operations" practically simultaneously in this theater.

In the Southern European TVD, staffs and troops operated according to the Display Determination exercise plan. A number of local exercises of combined and national armed forces of the bloc are planned within the framework of this exercise. One of them is the NATO mobile forces exercise Armada Exchange, being planned in Northern Italy.

Taking into account the specific nature of the bloc's southern flank, practicing air and sea operations in the Mediterranean Sea occupies the most prominent place here during exercises. Their culmination is to be a large amphibious landing in the European portion of Turkey in early October.

As in previous years, the NATO command authorities are devoting special attention to preparing their naval forces for carrying out operational missions in the Atlantic. During the course of exercise Sharp Spear, now in progress, navies of practically all countries of the bloc are practicing escorting convoys from the United States to Europe, organizing and carrying out protection of transatlantic lines of communication, and waging a struggle for sea supremacy. According to official data, more than 200 ships and more than 500 combat aircraft and helicopters are taking part.

So, everything is taking its normal course. It is fall outside, and the NATO generals are playing out the next, 15th, fall variant of unleashing and waging war in Europe. The inertia of militaristic traditions and devotion to them are truly great. Contrary to common sense, contrary to the sensible voice of the West European public, refusing to believe in the outdated myth about the "threat from the East," and, finally, contrary to the peaceloving statements of its own leaders, the NATO ship is following its former course, a course of gaining military superiority over the Warsaw Pact and of active military preparations.

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